



# Search Report

EIC 1700

STIC Database Tracking Number: 234781

To: JOHN HARDEE  
Location: REM-9A41  
Art Unit: 1751  
Monday, August 27, 2007

Case Serial Number: 10/516925

From: USHA SHRESTHA  
Location: EIC1700  
REM-4B28 / REM-4B31  
Phone: (571)272-3519

usha.shrestha@uspto.gov

## Search Notes

Examiner HARDEE:

Please see the search results, feel free to contact me if you have any questions or if you like to refine the search query. Thank you for using STIC services!

Regards,  
Usha

10/21/02  
75 87 92



# STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 1713
- Relevant prior art found, search results used as follows:
  - 102 rejection
  - 103 rejection
  - Cited as being of interest.
  - Helped examiner better understand the invention.
  - Helped examiner better understand the state of the art in their technology.

*Types of relevant prior art found:*

- Foreign Patent(s)
- Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art not found:

- Results verified the lack of relevant prior art (helped determine patentability).
- Results were not useful in determining patentability or understanding the invention.

Comments:

SCIENTIFIC REFERENCE BR  
Sci & Tech Inf. Ctr.  
AUG 20 2007

Patent & T.M. Office

Access DB# 234781

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Hawthorne

Examiner #: 72736 Date: 8/20/07  
Art Unit: 1751 Phone Number 30 21318 Serial Number: 10/576925  
Mail Box and Bldg/Room Location: 9A41 Results Format Preferred (circle): PAPER  DISK  E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please start search w/ monomers (i)+(ii).

Crosslinker content is important.

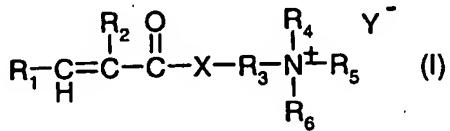
Thanks

189516,925

IN THE CLAIMS

Kindly amend the claims to read as follows.

1. (currently amended): An aqueous household cleaning or laundry care formulation comprising a cationic polymer and wherein the cationic polymer is formed from
  - a) a water soluble ethylenically unsaturated monomer or blend of monomers selected from the group consisting of cationic, non-ionic, and anionic, whereinae comprising at least one monomer is cationic monomer
  - b) at least one cross-linking agent in an amount of more than ~~[[50]]~~ 500 ppm by the weight of component a)
  - c) and at least one chain transfer agent.
2. (original): An aqueous formulation according to claim 1 wherein the cationic polymer is added to the formulation while in the form of particles, which have a volume average size of below 10 microns.
3. (previously presented): An aqueous formulation according to claim 1, wherein component a) is formed from 30 to 100 wt-%, based on the total weight of component a), of at least one cationic monomer and 0 – 80 wt-% of at least one monomer which is non-ionic or anionic.
4. (previously presented): An aqueous formulation according to claim 1, wherein the cationic monomer of component a) is a compound according to formula (I)



wherein

R<sub>1</sub> is hydrogen or methyl,

R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,

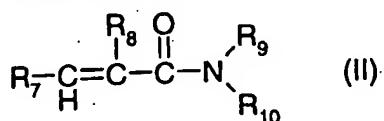
R<sub>3</sub> is C<sub>1</sub>-C<sub>4</sub>alkylene,

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> are independently from each other hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,

X is -O- or -NH- and

Y is Cl; Br; I; hydrogen sulphate or methosulfate.

5. (previously presented): An aqueous formulation according to claim 1, wherein the non-ionic monomer of component a) is N-vinyl pyrrolidone and/or a compound of formula (II)



wherein

R<sub>7</sub> signifies hydrogen or methyl,

R<sub>8</sub> signifies hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl, and

R<sub>9</sub> and R<sub>10</sub> signify independently from each other hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl.

6. (previously presented): An aqueous formulation according to claim 1, wherein the cross-linking agent of component b) is selected from the group consisting of divinyl benzene; tetra allyl ammonium chloride; allyl acrylates and methacrylates; diacrylates and dimethacrylates of glycols and polyglycols; butadiene; 1,7-octadiene; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid; N,N'-methylene-bisacrylamide and polyol polyallylethers.

7. (previously presented): An aqueous formulation according to claim 1, wherein the cross-linking agent of component b) is selected from the group consisting of tetra allyl ammonium chloride; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid and N,N'-methylene-bisacrylamide.

8. (cancelled).

9. (previously presented): An aqueous formulation according to claim 1, wherein the cross-linking agent of component b) is included in the range of 500 – 1000 ppm based on the component a).

10. (previously presented): An aqueous formulation according to claim 1, wherein the chain transfer agent c) is selected from the group consisting of mercaptans; malic acid, lactic acid; formic acid; isopropanol and hypophosphites.

11. (previously presented): An aqueous formulation according to claim 1, wherein the chain transfer agent c) is present in a range of from 10 to 50000 ppm based on the component a).

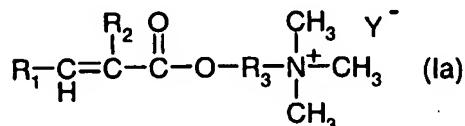
12. (previously presented): An aqueous formulation according to claim 1, wherein the chain transfer agent c) is present in a range of from 100 – 10000 ppm based on the component a).

13. (previously presented): An aqueous formulation according to claim 1, wherein the formulation comprises 0.005 to 15 wt-% of the cationic polymer.

14. (previously presented): An aqueous formulation according to claim 1, wherein the formulation comprises 0.01 to 10 wt-% of the cationic polymer.

15. (currently amended): An aqueous formulation according to claim 1, wherein the formulation contains

a) 0.01 – 5 wt-% of a cationic polymer and wherein the cationic polymer is formed from at least one compound of formula (Ia)



wherein

R<sub>1</sub> is hydrogen or methyl,

R<sub>2</sub> is hydrogen or methyl,

R<sub>3</sub> is C<sub>1</sub>-C<sub>2</sub>alkylene and

Y is Cl; Br or I, and

b) at least one cross-linking agent selected from the group consisting of divinyl benzene; tetra allyl ammonium chloride; allyl acrylates and methacrylates; diacrylates and dimethacrylates of glycols and polyglycols; butadiene; 1,7-octadiene; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid; N,N'-methylene-bisacrylamide and polyol polyallylethers in an amount of 500-100050—1200 ppm based on the component a), and

c) at least one chain transfer agent selected from the group consisting of mercaptans; malic acid; lactic acid; formic acid; isopropanol and hypophosphites in an amount an amount of 1000 – 9000 ppm based on the component a).

16. (cancelled).

17. (previously presented): An aqueous formulation according to claim 15, wherein at least one cross-linking agent is included in an amount of 700 – 900 ppm based on the component a).

18. (previously presented): An aqueous formulation according to claim 15, wherein at least one chain transfer agent is present in an amount of 2000 – 5000 ppm based on the component a).

19. (cancelled).

20. (previously presented): A fabric softener composition comprising

- A) 0.5 to 50 wt-%, based on the total weight of the composition, of cationic quaternary ammonium salts; tertiary fatty amines having at least one C<sub>8</sub>-C<sub>30</sub>alkyl chains, carboxylic acids having 8 to 30 carbons atoms and one carboxylic group per molecule; esters of polyhydric alcohols; fatty alcohols; ethoxylated fatty alcohols; alkylphenols; ethoxylated alkylphenols; ethoxylated fatty amines; ethoxylated monoglycerides; ethoxylated diglycerides; mineral oils and/or polyols;
- B) 0.005 to 15 wt-%, based on the total weight of the composition, of the cationic polymer according to claim 1;
- C) 0 to 20 wt-%, based on the total weight of the composition, of customary additives; and
- D) water to 100 %.

21. (previously presented): A fabric softener composition according to Claim 20 comprising

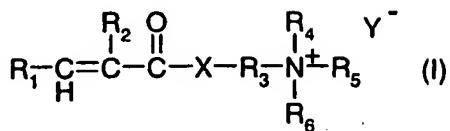
- A) 0.5 to 50 wt-%, based on the total weight of the composition, of a fabric softener;
- B) 0.005 to 15 wt-%, based on the total weight of the composition, of the cationic polymer;
- C) 0 to 20 % wt-%, based on the total weight of the composition, of customary additives; and
- D) 0 to 5% wt-%, based in the total weight of the composition, of a perfume, and
- E) water to 100 %.

22. (previously presented): A fabric softener composition according to claim 21 comprising

- A) 0.5 to 50 wt-%, based on the total weight of the composition, of the fabric softener;
- B) 0.005 to 15 wt-%, based on the total weight of the composition, of the cationic polymer;
- C) 0 to 20 wt-%, based on the total weight of the composition, of customary additives;
- D) 0 to 5 wt-%, based in the total weight of the composition, of a perfume;
- E) 0 to 0.5 wt-%, based in the total weight of the composition, of a component capable of sequestering metal ions and selected from the group consisting of:

- i) chelating components selected from the group consisting of amino carboxylic acid, organo aminophosphonic acid components, and mixtures thereof,
  - ii) polycarboxylic building components, other than those defined under i) as chelating components, comprising at least two carboxylic radicals separated from each other by not more than two carbon atoms, and,
  - iii) mixtures thereof, and
- F) water to 100 %.

23. (original): A fabric softener composition according to Claim 20, wherein the customary additives are alcohols; polyhydric alcohols; amphoteric and nonionic surfactants; oxyethylated fatty alcohols; hydrogenated and ethoxylated castor oil; alkyl polyglycosides; fatty alcohols; fatty acid esters; fatty acids; ethoxylated fatty acid glycerides; or fatty acid partial glycerides; inorganic or organic salts; non-aqueous solvents; pH buffers; perfumes; dyes; hydrotropic agents; antifoams; anti redeposition agents; enzymes; optical brighteners; antishrink agents; stain removers; germicides; fungicides; antioxidants; corrosion inhibitors; dye fixing agents; dye transfer inhibitors; wrinkle recovery agents and/or wet soiling reduction agents.
24. (currently amended): A cationic polymer formed from
- a) a water soluble ethylenically unsaturated monomer or blend of monomers selected from the group consisting of cationic, non-ionic, and anionic, whereat least one monomer is cationic monomer
  - b) at least one cross-linking agent in an amount of more than 600 ppm by the weight of component a)
  - c) and optionally at least one chain transfer agent.
25. (previously presented): A cationic polymer according to Claim 24, wherein the component a) comprises 30 to 100 wt-% of one cationic monomer and 0 – 80 wt-% of a monomer which is non-ionic or anionic.
26. (previously presented): A cationic polymer according to Claim 24, wherein the cationic monomer of component a) is a compound according to formula (I)



wherein

$\text{R}_1$  is hydrogen or methyl,

$\text{R}_2$  is hydrogen or  $\text{C}_1\text{-}\text{C}_4$ alkyl,

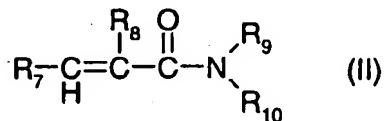
$\text{R}_3$  is  $\text{C}_1\text{-}\text{C}_4$ alkylene,

$\text{R}_4$ ,  $\text{R}_5$  and  $\text{R}_6$  are independently from each other hydrogen or  $\text{C}_1\text{-}\text{C}_4$ alkyl,

$\text{X}$  is  $-\text{O}-$  or  $-\text{NH}-$  and

$\text{Y}$  is  $\text{Cl}$ ;  $\text{Br}$ ;  $\text{I}$ ; hydrogen sulphate or methosulfate.

27. (previously presented): A cationic polymer according to claim 24, wherein the non-ionic monomer of component a) is N-vinyl pyrrolidone and/or compounds of formula (II)



wherein

$\text{R}_7$  signifies hydrogen or methyl,

$\text{R}_8$  signifies hydrogen or  $\text{C}_1\text{-}\text{C}_4$ alkyl, and

$\text{R}_9$  and  $\text{R}_{10}$  signify independently from each other hydrogen or  $\text{C}_1\text{-}\text{C}_4$ alkyl.

28. (currently amended): A cationic polymer according to claim 24, wherein the cross-linking agent of component b) is selected from the group consisting of divinyl benzene; tetra allyl ammonium chloride; allyl acrylates and methacrylates; diacrylates and dimethacrylates of glycols and polyglycols; butadiene; 1,7-octadiene; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid;  $\text{N},\text{N}'$ -methylene-bisacrylamide and polyol polyallylethers.

29. (previously presented): A cationic polymer according to claim 24, wherein the cross-linking agent of component b) is selected from the group consisting of tetra allyl ammonium chloride; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid and  $\text{N},\text{N}'$ -methylene-bisacrylamide.

30. (previously presented): A cationic polymer according to claim 24, wherein the cross-linking agent of component b) is included in the range of 650 – 1200 ppm based on the component a).

31. (cancelled).

32. (previously presented): A cationic polymer according to claim 24, wherein the cross-linking agent of component b) is included in the range of 700 – 900 ppm based on the component a).

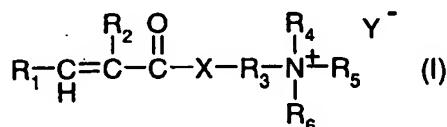
33. (previously presented): A cationic polymer according to claim 24, wherein the chain transfer agent c) is selected the group consisting of mercaptans; malic acid; lactic acid, formic acid; isopropanol and hypophosphites.

34. (previously presented): A cationic polymer according to claim 24, wherein the chain transfer agent c) is present in a range of from 10 to 50000 ppm based on the component a).

35. (previously presented): A cationic polymer according to claim 24, wherein the chain transfer agent c) is present in a range of from 100 – 10000 ppm based on the component a).

36. (previously presented): A cationic polymer according to claim 24, formed from

a) 30 to 100 wt-% of at least one compound according to formula (I)



wherein

R<sub>1</sub> is hydrogen or methyl,

R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,

R<sub>3</sub> is C<sub>1</sub>-C<sub>4</sub>alkylene,

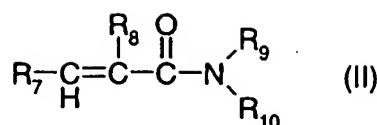
R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> are independently from each other hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,

X is -O- or -NH- and

Y is Cl; Br; I; hydrogen sulphate or methosulfate, and

0 – 80 wt-% of N-vinyl pyrrolidone and/or

at least one compound of formula (II)



wherein

$R_7$  signifies hydrogen or methyl,

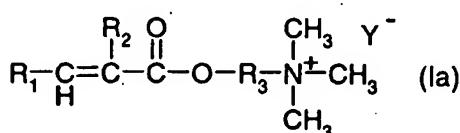
$R_8$  signifies hydrogen or  $C_1$ - $C_4$ alkyl, and

$R_9$  and  $R_{10}$  signify independently from each other hydrogen or  $C_1$ - $C_4$ alkyl,

- b) at least one cross-linking agent in an amount of 700 – 900 ppm based on the component
  - a) selected from the group consisting of divinyl benzene; tetra allyl ammonium chloride; allyl acrylates and methacrylates; diacrylates and dimethacrylates of glycols and polyglycols; butadiene; 1,7-octadiene; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid;  $N,N'$ -methylene-bisacrylamide and polyol polyallylethers, and
  - c) from 0 to 50000 ppm based on the component a), of at least one chain transfer agent selected from the group consisting of mercaptans; malic acid; lactic acid; formic acid; isopropanol and hypophosphites.

37. (previously presented): A cationic polymer according to claim 24, formed from

- a) 30 to 100 wt-% of at least one compound according to formula (Ia)



wherein

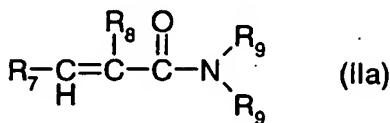
$R_1$  is hydrogen or methyl,

$R_2$  is hydrogen or methyl,

$R_3$  is  $C_1$ - $C_2$ alkylene and

$Y$  is Cl; Br or I, and

0 – 80 wt-% of at least one compound of formula (IIa)



wherein

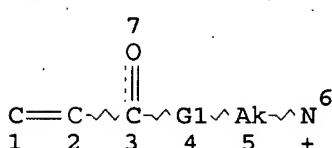
$R_7$  signifies hydrogen or methyl,

$R_8$  signifies hydrogen or methyl, and

$R_9$  signifies hydrogen; methyl; ethyl or propyl,

- b) 700 – 900 ppm (based on the component a) of at least one cross-linking agent selected from the group consisting of divinyl benzene; tetra allyl ammonium chloride; allyl acrylates and methacrylates; diacrylates and dimethacrylates of glycols and polyglycols; butadiene; 1,7-octadiene; allyl-acrylamides and allyl-methacrylamides; bisacrylamidoacetic acid; N,N'-methylene-bisacrylamide and polyol polyallylethers, and
- c) from 100 – 10000 ppm based on the component a) of at least one chain transfer agent selected from the group consisting of mercaptans; malic acid; lactic acid; formic acid; isopropanol and hypophosphites.

=> d que 161  
L2 5 SEA FILE=REGISTRY ABB=ON PLU=ON (196004-32-7/BI OR  
208667-46-3/BI OR 27252-75-1/BI OR 54511-77-2/BI OR  
632358-56-6/BI)  
L9 STR



VAR G1=N/O

NODE ATTRIBUTES:

CHARGE IS \*+ AT 6

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

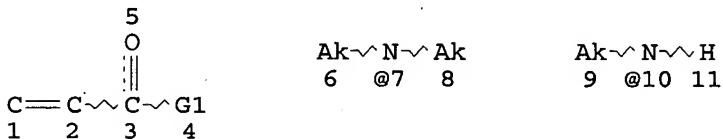
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L15 SCR 2043

L17 8484 SEA FILE=REGISTRY SSS FUL L9 AND L15

L27 STR



VAR G1=NH2/10/7

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 6

CONNECT IS E1 RC AT 8

CONNECT IS E1 RC AT 9

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L29 2125 SEA FILE=REGISTRY SUB=L17 SSS FUL L27  
L30 1 SEA FILE=REGISTRY ABB=ON PLU=ON L2 AND GLYC?  
L32 1 SEA FILE=REGISTRY ABB=ON PLU=ON "1,7-OCTADIENE"/CN  
L33 1 SEA FILE=REGISTRY ABB=ON PLU=ON ACRYLAMIDE/CN  
L34 1 SEA FILE=REGISTRY ABB=ON PLU=ON METHACRYLAMIDE/CN  
L35 4 SEA FILE=REGISTRY ABB=ON PLU=ON ACRYLAMIDOACETIC  
ACID?/CNS  
L36 34 SEA FILE=REGISTRY ABB=ON PLU=ON METHYLENE-BISACRYLAMID?/C  
NS  
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L38 566 SEA FILE=HCAPLUS ABB=ON PLU=ON L30  
L39 921 SEA FILE=HCAPLUS ABB=ON PLU=ON L32  
L40 14094 SEA FILE=HCAPLUS ABB=ON PLU=ON L33  
L41 2191 SEA FILE=HCAPLUS ABB=ON PLU=ON L34

L42	13 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L35
L43	724 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L36
L44	173 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L37 AND (L38 OR L39 OR L40 OR L41 OR L42 OR L43)
L45	9 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L44 AND DETERG?/SC, SX
L46	48633 SEA FILE=HCAPLUS ABB=ON	PLU=ON	DETERGENTS+PFT, NT, OLD, NEW/ CT
L47	5 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L44 AND L46
L48	5 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L37 AND L47
L49	384 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L37 AND (CROSSLINK? OR CROSS (A) LINK?)
L50	11 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L49 AND (L46 OR DETERG?)
L58	38452 SEA FILE=HCAPLUS ABB=ON	PLU=ON	"CROSSLINKING AGENTS"+PFT, NT, OLD, NEW/CT
L59	24 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L37 AND L58
L60	21 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L45 OR L47 OR L48 OR L50
L61	44 SEA FILE=HCAPLUS ABB=ON	PLU=ON	L59 OR L60

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L61 ANSWER 1 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:673819 HCAPLUS

DOCUMENT NUMBER: 147:74731

TITLE: Compositions containing polymer microgels for treatment and/or modification of hard surfaces during cleaning

INVENTOR(S): Pitois, Claire; Karagianni, Katerina

PATENT ASSIGNEE(S): Rhodia Recherches et Technologies, Fr.

SOURCE: Fr. Demande, 72pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2894971	A1	20070622	FR 2005-12949	20051220
WO 2007071591	A1	20070628	WO 2006-EP69581	20061212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

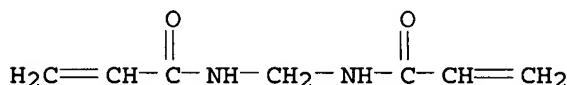
PRIORITY APPLN. INFO.: FR 2005-12949 A 20051220

ED Entered STN: 22 Jun 2007

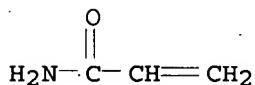
AB Use of microgels of polymers having crosslinked cores and optionally macromol. branches in hard-surface cleaning compns. provide surfaces that are hydrophilic and resist redeposition of soil and streaks after cleaning. A typical microgel polymer was manufactured by radical polymerization of 13.42 g acrylamide with 4.28 g N,N'-

IT methylenebisacrylamide.  
 IT 96022-49-0P, Acrylamide-2-acryloyloxyethyltrimethylammonium  
 methyl sulfate-N,N'-methylenebisacrylamide copolymer  
 (compns. containing polymer microgels for treatment and/or modification  
 of hard surfaces during cleaning to provide hydrophilic surfaces  
 and prevent soil redeposition)  
 RN 96022-49-0 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, methyl  
 sulfate (1:1), polymer with N,N'-methylenebis[2-propenamide] and  
 2-propenamide (CA INDEX NAME)

CM 1

CRN 110-26-9  
CMF C7 H10 N2 O2

CM 2

CRN 79-06-1  
CMF C3 H5 N O

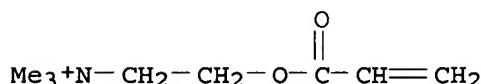
CM 3

CRN 13106-44-0  
CMF C8 H16 N O2 . C H3 O4 S

CM 4

CRN 21228-90-0  
CMF C H3 O4 S $\text{Me}-\text{O}-\text{SO}_3^-$ 

CM 5

CRN 20284-80-4  
CMF C8 H16 N O2

CC 46-6 (Surface Active Agents and Detergents)  
 IT Detergents  
     (cleaning compns.; compns. containing polymer microgels for treatment and/or modification of hard surfaces during cleaning to provide hydrophilic surfaces and prevent soil redeposition)  
 IT Detergents  
     (dishwashing; compns. containing polymer microgels for treatment and/or modification of hard surfaces during cleaning to provide hydrophilic surfaces and prevent soil redeposition)  
 IT 25034-58-6P, Acrylamide-N,N'-methylenebisacrylamide copolymer  
   96022-49-0P, Acrylamide-2-acryloyloxyethyltrimethylammonium methyl sulfate-N,N'-methylenebisacrylamide copolymer  
     (compns. containing polymer microgels for treatment and/or modification of hard surfaces during cleaning to provide hydrophilic surfaces and prevent soil redeposition)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 2 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2007:464353 HCAPLUS  
 DOCUMENT NUMBER: 146:448477  
 TITLE: Encapsulation system comprising high mannuronic acid-containing alginate and a polycation  
 INVENTOR(S): Vasconcellos, Alfred; Emerich, Dwaine; Thanos, Chris; Bintz, Briannan; Geaney, Marilyn Sandra; Skinner, Stephen John Martin; Tan, Paul Lip Jin  
 PATENT ASSIGNEE(S): Living Cell Products Pty. Ltd., Australia  
 SOURCE: PCT Int. Appl., 59pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007046719	A2	20070426	WO 2006-NZ270	20061024
WO 2007046719	A3	20070614		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRIORITY APPLN. INFO.: US 2005-729422P P 20051021

ED Entered STN: 27 Apr 2007  
 AB The present invention is directed to a composition comprising high mannuronic acid-containing alginate and a polycation having a polydispersity index of less than 1.5. The composition is particularly useful for making biocompatible microcapsules containing living cells for allo- or xeno-transplantation. Such microcapsules have enhanced

durability and can maintain their structural and functional integrity over long periods of time compared to prior art alginate microcapsules. Microdisperse alginate-polyornithine microcapsules were fabricated and injected into the peritoneal cavity of rats. After 14, 30, 60, and 90 days capsules were retrieved from each animal and were analyzed for chemical integrity. The microcapsules were superior to other prior art microcapsules in terms of capsules geometry and their durability and functionality in vivo.

IT 391201-84-6

(encapsulation system comprising high mannuronic acid-containing alginate and polycation)

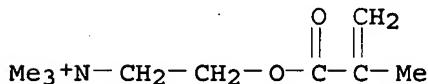
RN 391201-84-6 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, bromide (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 56727-55-0

CMF C9 H18 N O2 . Br



● Br<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM A61M

CC 63-6 (Pharmaceuticals)

IT Crosslinking agents

Polyelectrolytes

(cationic; encapsulation system comprising high mannuronic acid-containing alginate and polycation)

IT 9001-63-2, Lysozyme 9002-98-6 9004-54-0D, Dextran, modified 9005-32-7, Alginic acid 9016-53-9D, Polyimidazoline, quaternized 24937-49-3 25104-12-5, Poly-L-ornithine 25104-18-1, Poly-L-lysine 25154-86-3, Polydimethylaminoethylmethacrylate 25609-94-3, Poly-2-hydroxy-3-methacryloxypropyl trimethylammonium chloride 25610-84-8D, modified 26062-79-3, Polydiallyldimethylammonium chloride 26161-33-1 26336-38-9, Polyvinylamine 26590-05-6 26780-21-2, Poly-4-vinylbenzyltrimethylammonium chloride 26913-06-4, Poly[imino(1,2-ethanediyl)] 28301-34-0, Polydiallyldimethylammonium 28728-55-4, Polybrene 29471-77-0 30551-89-4, Polyallylamine 30581-59-0 32071-67-3 34540-03-9, Polyacrylimide 38000-06-5,

Poly-L-lysine 53597-25-4 54240-53-8 62962-69-0,  
 Poly-1-methyl-4-vinylpyridinium bromide 68912-04-9 84563-76-8,  
 Chitosan glutamate 163530-57-2 184713-15-3 226984-81-2  
**391201-84-6**

(encapsulation system comprising high mannuronic acid-containing alginate and polycation)

L61 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:469827 HCAPLUS

DOCUMENT NUMBER: 144:451086

TITLE: Polymeric stabilizing agent useful for the polymerization of acrylamide monomers in inverse-emulsions or inverse-suspensions

INVENTOR(S): Pantchev, Ivan; Hunkeler, David

PATENT ASSIGNEE(S): AquaSpecialties S.A., Switz.

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006106180	A1	20060518	US 2004-991628	20041118
PRIORITY APPLN. INFO.:			US 2004-991628	20041118

ED Entered STN: 19 May 2006

AB The stabilizer, amphiphilic copolymer having Mn 500-50,000 g/mol, is prepared from a mixture of linear alkylmethacrylates hydrophobic monomers and acrylic or methacrylic acid hydrophilic co-monomers. Thus, 86 mol% a mixture of methacrylates having C16-18 alkyl chain length (C16:C18=25:75) and 14 mol% acrylic acid was polymerized in Isopar M to give a title stabilizing agent (IB). Acrylamide 285.5, acrylic acid 72.4, EDTA sodium salt 0.25, potassium bromate 0.2, ammonium chloride 10, and water 329.9 g were stirred and buffered to a pH 7.0 by adding 50% water solution of sodium hydroxide to form an aqueous phase, which was transferred to an oil phase under stirring to form an emulsion, which was polymerized at 40-55° for 6 h to give a polymer emulsion after the workup, wherein the oil phase comprised aliphatic solvent 213.2, sorbitan monoisostearate 12, polyoxyethylenated sorbitan trioleate 8, and IB 4.2 g.

IT 69418-26-4P, Acrylamide-acryloyloxyethyltrimethylammonium chloride copolymer  
 (polymerization of acrylamide monomers in inverse-suspensions containing polymeric stabilizing agent)

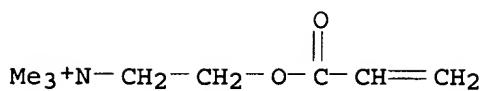
RN 69418-26-4 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 44992-01-0

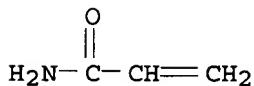
CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
CMF C3 H5 N O

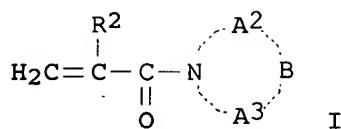


INCL 526303100; 526317100; 526319000; 526286000; 526310000  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 IT Chain transfer agents  
     Crosslinking agents  
     Sequestering agents  
     Surfactants  
     (polymeric stabilizing agent useful for the polymerization of acrylamide monomers in inverse-emulsions or inverse-suspensions)  
 IT 69418-26-4P, Acrylamide-acryloyloxyethyltrimethylammonium chloride copolymer  
     (polymerization of acrylamide monomers in inverse-suspensions containing polymeric stabilizing agent)

L61 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:1282403 HCAPLUS  
 DOCUMENT NUMBER: 144:37597  
 TITLE: Cleaning compositions with foam property, foamability, and feeling, and low skin irritation  
 INVENTOR(S): Inoue, Masayoshi; Doi, Yasuhiro  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005336387	A	20051208	JP 2004-159385	20040528
PRIORITY APPLN. INFO.:			JP 2004-159385	20040528

ED Entered STN: 08 Dec 2005  
 GI



**AB** Title compns. comprise (A) ether carboxylic acid type surfactants R1Z1(A1O)nY1COOX1, (B) glyceryl ether having C4-12 alkyl or alkenyl group, and (C) cationic group-containing copolymers prepared from  $\geq 1$  nonionic group-containing vinyl monomer CH2:CR2C(:O)NR3R4 or I,  $\geq 1$  cationic group-containing vinyl monomer CH2:CR2C(:O)Y2Z2N+R5R6R7X2- or CH2:CR2CH2N+R10R11CH2CR9:CH2X3-, and  $\geq 1$  crosslinkable vinyl monomer containing  $\geq 2$  groups selected from vinyl, (meth)acryloyl, and allyl, wherein R1 = C5-21 linear or branched hydroxy-(un)containing alkyl or alkenyl; R2, R8, R9 = H or methyl; R3, R4 = H or C1-4 linear or branched alkyl or alkenyl; R5, R6 = C1-4 alkyl or alkenyl; R7 = H or C1-4 alkyl or alkenyl; R10, R11 = H or C1-4 alkyl; Z1 = O, CONH; Z2 = C1-4 (if Y2 = CH2 then C0-3) linear or branched alkenyl; A1 = C2-3 alkylene; X1 = H, alkali metal, alkaline earth metal, ammonium, or alkanolamine X2 = conjugate base of acid, halogen, or C1-4 alkylsulfate; A2, A3 = (CH2) $_m$ ; Y1 = C1-3 alkylene; Y2 = O, NH, CH2, or OCH2CH(OH); B = O or CH2; m = 2-6 integer; and n = 2-12 integer. Thus, 2-methacryloyloxyethylmethylethylammonium monoethylsulfate 23.85, N,N-dimethylacrylamide 71.37, and NK Ester 9G 0.0429 g were polymerized to give a cationic copolymer, 0.3% of which was mixed with polyethylene glycol lauryl ether sodium acetate 18, isodecyl glyceryl ether 3.0, and Poiz C-L150 (cationized cellulose) 60.0%, and balance water to give a test sample, showing good foam property, foamability, and feeling.

**IT** 269735-77-5P

(NK Ester 14G; cleaning compns. with foam property, foamability, and feeling, and low skin irritation)

**RN** 269735-77-5 HCPLUS

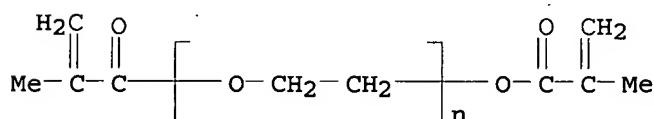
**CN** Ethanaminium, N-ethyl-N,N-dimethyl-2-[{(2-methyl-1-oxo-2-propen-1-yl)oxy}-, ethyl sulfate (1:1), polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propen-1-yl)- $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]poly(oxy-1,2-ethanediyl) (CA INDEX NAME)

**CM** 1

**CRN** 25852-47-5

**CMF** (C2 H4 O) $_n$  C8 H10 O3

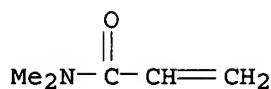
**CCI** PMS



**CM** 2

**CRN** 2680-03-7

**CMF** C5 H9 N O

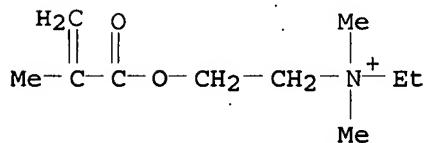


CM 3

CRN 13223-03-5  
 CMF C10 H20 N O2 . C2 H5 O4 S

CM 4

CRN 48063-69-0  
 CMF C10 H20 N O2



CM 5

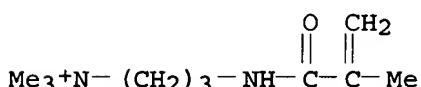
CRN 48028-76-8  
 CMF C2 H5 O4 S

Et-O-SO<sub>3</sub><sup>-</sup>

IT 218129-29-4P 269735-80-0P 870639-66-0P  
 (cleaning compns. with foam property, foamability, and feeling, and  
 low skin irritation)  
 RN 218129-29-4 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-  
 , chloride, polymer with N,N-dimethyl-2-propenamide and  
 α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-  
 propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

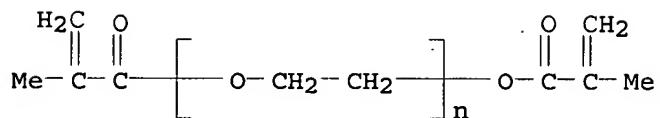
CM 1

CRN 51410-72-1  
 CMF C10 H21 N2 O . Cl

● Cl<sup>-</sup>

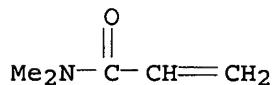
CM 2

CRN 25852-47-5  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>  
 CCI PMS



CM 3

CRN 2680-03-7  
 CMF C<sub>5</sub> H<sub>9</sub> N O

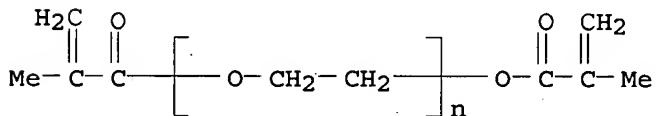


RN 269735-80-0 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[{(2-methyl-1-oxo-2-propenyl)oxy}-, chloride, polymer with N,N-dimethyl-2-propenamide and α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

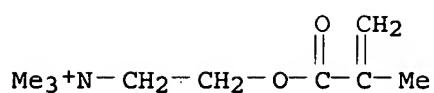
CM 1

CRN 25852-47-5  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>  
 CCI PMS



CM 2

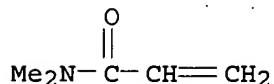
CRN 5039-78-1  
 CMF C<sub>9</sub> H<sub>18</sub> N O<sub>2</sub> . Cl



● Cl<sup>-</sup>

CM 3

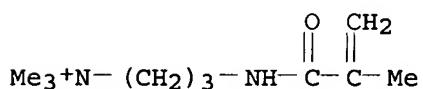
CRN 2680-03-7  
CMF C5 H9 N O



RN 870639-66-0 HCPLUS  
CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-chloride, polymer with N,N-dimethyl-2-propenamide and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

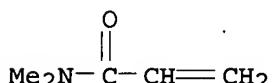
CRN 51410-72-1  
CMF C10 H21 N2 O . Cl



● Cl<sup>-</sup>

CM 2

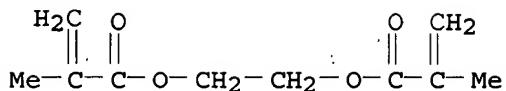
CRN 2680-03-7  
CMF C5 H9 N O



CM 3

CRN 97-90-5

CMF C10 H14 O4



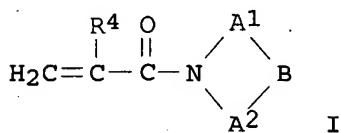
- IC ICM C11D001-06  
 ICS A61K007-075; A61K007-50; C11D001-68; C11D003-37  
 CC 46-6 (Surface Active Agents and Detergents)  
 Section cross-reference(s): 62  
 IT Detergents  
 Shampoos  
 Surfactants  
 (cleaning compns. with foam property, foamability, and feeling, and low skin irritation)  
 IT 269735-77-5P  
 (NK Ester 14G; cleaning compns. with foam property, foamability, and feeling, and low skin irritation)  
 IT 218129-29-4P 269735-80-0P 870639-66-0P  
 (cleaning compns. with foam property, foamability, and feeling, and low skin irritation)

L61 ANSWER 5 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:1196568 HCPLUS  
 DOCUMENT NUMBER: 143:465601  
 TITLE: Skin-cleansing compositions or shampoos containing phosphate ester surfactants, glyceryl ethers, and polymers having cationic groups  
 INVENTOR(S): Yumoto, Masaharu; Tamura, Tatsunori; Fujii, Ryosuke  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005314615	A	20051110	JP 2004-136073	20040430
PRIORITY APPLN. INFO.:			JP 2004-136073	20040430

ED Entered STN: 10 Nov 2005

GI



- AB The skin-cleansing compns. or shampoos contain phosphate ester surfactants (A) comprising 50:50 to 100:0 (by weight) mixts. of phosphate monoesters R<sub>1</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>k</sub>OP(O)(OX<sub>1</sub>)OY<sub>1</sub> and phosphate diesters

R<sub>2</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>m</sub>OP(O)(OX<sub>2</sub>)O(CH<sub>2</sub>CH<sub>2</sub>O)<sub>n</sub>R<sub>3</sub> (R<sub>1</sub>-R<sub>3</sub> = C<sub>8</sub>-18 linear or branched alkyl, alkenyl; X<sub>1</sub>, X<sub>2</sub>, Y<sub>1</sub> = H, alkali metal, alkaline earth metal, basic amino acid residue, alkanolamine, ammonium; k, m, n = 0-10), glyceryl ethers (B) having C<sub>4</sub>-12 linear or branched alkyl or alkenyl groups, and cationic group-containing copolymers (C) prepared by radical polymerization of

monomers containing nonionic group-containing vinyl monomers CH<sub>2</sub>:CR<sub>4</sub>CONR<sub>5</sub>R<sub>6</sub> (R<sub>4</sub> = H, Me; R<sub>5</sub>, R<sub>6</sub> = H, C<sub>1</sub>-4 linear or branched alkyl, alkenyl) and/or I [R<sub>4</sub> = same as above; A<sub>1</sub>, A<sub>2</sub> = (CH<sub>2</sub>)<sub>n</sub>; n = 2-6; B = O, CH<sub>2</sub>] and cationic group-containing vinyl monomers CH<sub>2</sub>:CR<sub>4</sub>COY<sub>2</sub>ZN+R<sub>7</sub>R<sub>8</sub>R<sub>9</sub> X<sub>3</sub>- [R<sub>4</sub> = same as above; R<sub>7</sub>, R<sub>8</sub> = C<sub>1</sub>-4 alkyl, alkenyl; R<sub>9</sub> = H, C<sub>1</sub>-4 alkyl, alkenyl; R<sub>9</sub> = H, C<sub>1</sub>-4 alkyl; Y<sub>2</sub> = O, NH, CH<sub>2</sub>, OCH<sub>2</sub>CH(OH); Z = C<sub>1</sub>-4 (C<sub>1</sub>-3 when Y<sub>2</sub> is CH<sub>2</sub>) linear or branched alkylene; X<sub>3</sub> = acid conjugate base, halo, C<sub>1</sub>-4 alkyl sulfate] and/or cationic group-containing crosslinkable vinyl monomers CH<sub>2</sub>:CR<sub>10</sub>CH<sub>2</sub>N+R<sub>12</sub>R<sub>13</sub>CH<sub>2</sub>CR<sub>11</sub>:CH<sub>2</sub> X<sub>3</sub>- (R<sub>10</sub>, R<sub>11</sub> = H, Me; R<sub>12</sub>, R<sub>13</sub> = H, C<sub>1</sub>-4 alkyl; X<sub>3</sub> = same as above). Optionally, the cleansing compns. or shampoos also contain polyhydric alcs. A composition containing polyoxyethylene lauryl ether phosphate K salt mixture (monoester:diester = 95:5) 30, n-octyl glyceryl ether 1.5, N,N-dimethylaminoethyl methacrylic acid di-Et sulfate salt-N,N-dimethylacrylamide-NK 9G (polyethylene glycol dimethacrylate) copolymer (preparation given) 0.3, and H<sub>2</sub>O to 100 weight% showed good foaming properties, high detergency, skin-conditioning effect, and no skin irritation.

IT 218129-29-4P 218129-33-0P 218129-36-3P  
269735-77-5P 269735-80-0P 269739-82-4P  
269747-56-0P 868857-93-6P

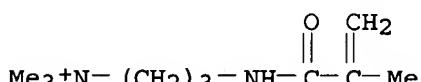
(skin-cleansing liqs. or shampoos having conditioning effect, containing polyoxyethylene phosphate ester surfactants, glyceryl ethers, cationic acrylic copolymers, and optionally polyols)

RN 218129-29-4 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-chloride, polymer with N,N-dimethyl-2-propenamide and α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

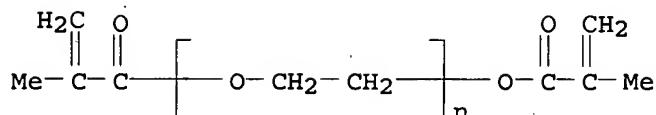
CRN 51410-72-1  
CMF C10 H21 N2 O . Cl



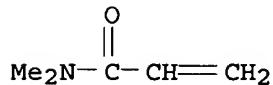
● Cl<sup>-</sup>

CM 2

CRN 25852-47-5  
CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>  
CCI PMS

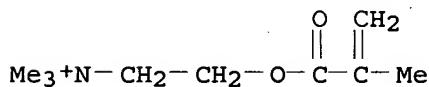


CM 3

CRN 2680-03-7  
CMF C5 H9 N O

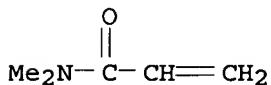
RN 218129-33-0 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide and 3-(2-propenyoxy)-2,2-bis[(2-propenyoxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1  
CMF C9 H18 N O2 . Cl

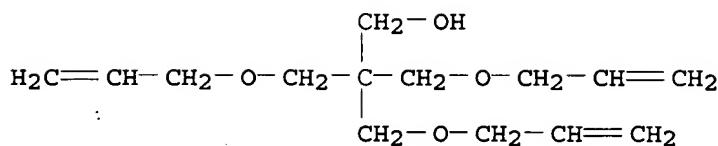
● Cl -

CM 2

CRN 2680-03-7  
CMF C5 H9 N O

CM 3

CRN 1471-17-6  
CMF C14 H24 O4



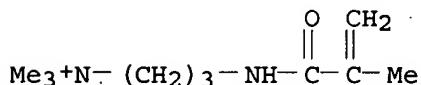
RN 218129-36-3 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-chloride, polymer with N-(1,1-dimethylethyl)-2-propenamide, N,N-dimethyl-2-propenamide and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

CMF C10 H21 N2 O . Cl

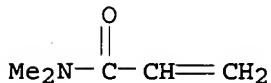


● Cl-

CM 2

CRN 2680-03-7

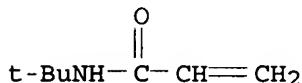
CMF C5 H9 N O



CM 3

CRN 107-58-4

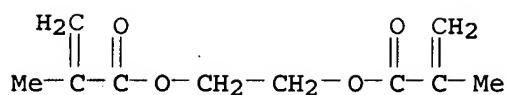
CMF C7 H13 N O



CM 4

CRN 97-90-5

CMF C10 H14 O4



RN 269735-77-5 HCAPLUS

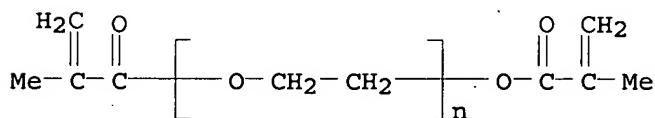
CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, ethyl sulfate (1:1), polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propen-1-yl)- $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]poly(oxy-1,2-ethanediyl) (CA INDEX NAME)

CM 1

CRN 25852-47-5

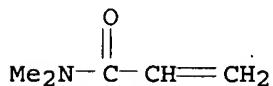
CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>

CCI PMS



CM 2

CRN 2680-03-7

CMF C<sub>5</sub> H<sub>9</sub> N O

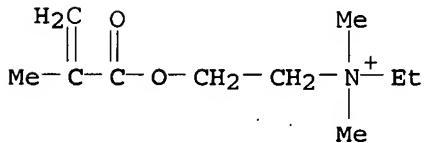
CM 3

CRN 13223-03-5

CMF C<sub>10</sub> H<sub>20</sub> N O<sub>2</sub> . C<sub>2</sub> H<sub>5</sub> O<sub>4</sub> S

CM 4

CRN 48063-69-0

CMF C<sub>10</sub> H<sub>20</sub> N O<sub>2</sub>

CM 5

CRN 48028-76-8

CMF C2 H5 O4 S

Et-O-SO<sub>3</sub><sup>-</sup>

RN 269735-80-0 HCPLUS

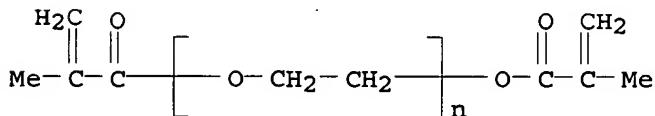
CN Ethanaminium, N,N,N-trimethyl-2-[ (2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25852-47-5

CMF (C2 H4 O)<sub>n</sub> C8 H10 O3

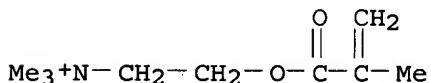
CCI PMS



CM 2

CRN 5039-78-1

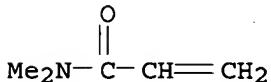
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

CMF C5 H9 N O

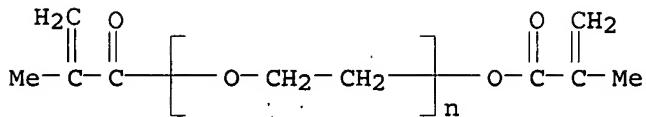


RN 269739-82-4 HCPLUS

CN 1-Propanaminium, N-ethyl-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, ethyl sulfate, polymer with  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and N-methyl-2-propenamide (9CI) (CA INDEX NAME)

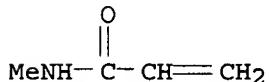
CM 1

CRN 25852-47-5  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>  
 CCI PMS



CM 2

CRN 1187-59-3  
 CMF C<sub>4</sub> H<sub>7</sub> N O

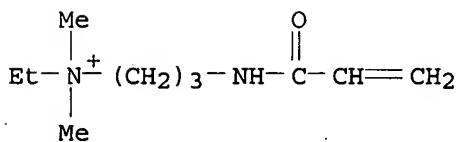


CM 3

CRN 117908-82-4  
 CMF C<sub>10</sub> H<sub>21</sub> N<sub>2</sub> O . C<sub>2</sub> H<sub>5</sub> O<sub>4</sub> S

CM 4

CRN 117908-81-3  
 CMF C<sub>10</sub> H<sub>21</sub> N<sub>2</sub> O



CM 5

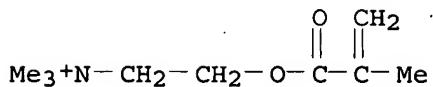
CRN 48028-76-8  
 CMF C<sub>2</sub> H<sub>5</sub> O<sub>4</sub> S

Et-O-SO<sub>3</sub><sup>-</sup>

RN 269747-56-0 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N-(1,1-dimethylethyl)-2-propenamide and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

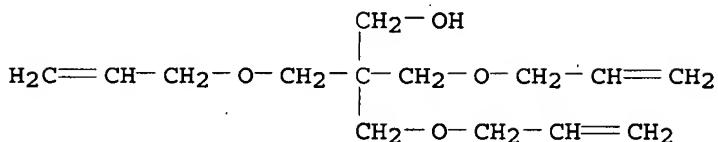
CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl



● Cl-

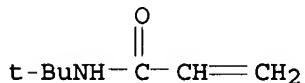
CM 2

CRN 1471-17-6  
 CMF C14 H24 O4



CM 3

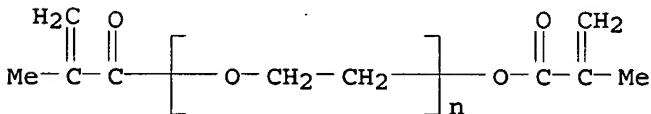
CRN 107-58-4  
 CMF C7 H13 N O



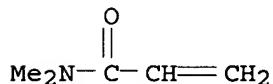
RN 868857-93-6 HCPLUS  
 CN 1-Propanaminium, N-ethyl-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, ethyl sulfate, polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25852-47-5  
 CMF (C2 H4 O)n C8 H10 O3  
 CCI PMS



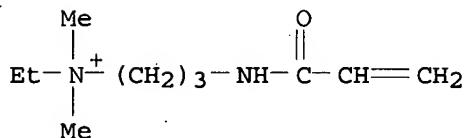
CM 2

CRN 2680-03-7  
CMF C5 H9 N O

CM 3

CRN 117908-82-4  
CMF C10 H21 N2 O . C2 H5 O4 S

CM 4

CRN 117908-81-3  
CMF C10 H21 N2 O

CM 5

CRN 48028-76-8  
CMF C2 H5 O4 SEt-O-SO<sub>3</sub><sup>-</sup>

IC ICM C11D001-34  
 ICS A61K007-075; A61K007-50; C11D001-68; C11D003-37  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 37  
 IT Polyoxyalkylenes, biological studies  
 (acrylic, crosslinked; skin-cleansing liqs. or shampoos  
 having conditioning effect, containing polyoxyethylene phosphate ester  
 surfactants, glyceryl ethers, cationic acrylic copolymers, and  
 optionally polyols)  
 IT 25852-47-5P, NK 1G 218129-29-4P 218129-33-0P  
 218129-36-3P 269735-77-5P 269735-78-6P  
 269735-80-0P 269739-82-4P 269747-56-0P  
 868857-93-6P  
 (skin-cleansing liqs. or shampoos having conditioning effect,  
 containing polyoxyethylene phosphate ester surfactants, glyceryl  
 ethers, cationic acrylic copolymers, and optionally polyols)

L61 ANSWER 6 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:979173 HCPLUS  
 DOCUMENT NUMBER: 143:268761  
 TITLE: Storage-stable liquid bleaching agent compositions containing crosslinked acrylamide polymers  
 INVENTOR(S): Ishizuka, Hitoshi; Kodera, Takanori; Maki, Masataka; Yamaguchi, Yukiyoshi  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005239866	A	20050908	JP 2004-51289	20040226
PRIORITY APPLN. INFO.:			JP 2004-51289	20040226

ED Entered STN: 08 Sep 2005  
 AB The invention relates to liquid bleaching agent compns., useful for laundry, with pH at 20° 2-6 comprising crosslinked polymers of cationic monomers [e.g., dialkylaminoalkyl (meth)acrylates, N-(N',N'-dialkylaminoalkyl) (meth)acrylamides] and/or nonionic ones [e.g., N-Me acrylamide, N-vinyl pyrrolidone, H2O-insol. (meth)acrylic acid esters], H2O2, and H2O. Thus, a composition comprising ethylenebisacrylamide-crosslinked acrylamide polymers containing (CH2)2Me3N+, p-C11H23CO2C6H4SO3Na, H2O2, and H2O showed viscosity at 20° initially and after storage at 40° for 1 mo, resp., 27 and 22 mPa·s.

IT 863982-61-0P  
 (storage-stable liquid bleaching agents containing crosslinked acrylamide polymers)

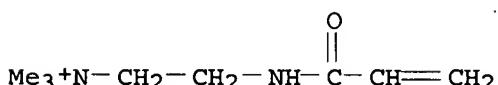
RN 863982-61-0 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)amino]-, polymer with N,N'-1,2-ethanediylbis[2-propenamide] and 2-propenamide (9CI)  
 (CA INDEX NAME)

CM 1

CRN 44990-33-2

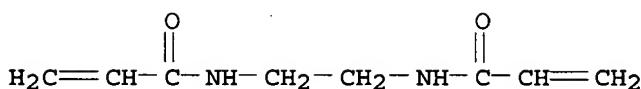
CMF C8 H17 N2 O



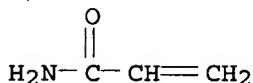
CM 2

CRN 2956-58-3

CMF C8 H12 N2 O2



CM 3

CRN 79-06-1  
CMF C3 H5 N O

- IC ICM C11D003-37  
 ICS C11D003-395; C11D017-08; D06L003-02  
 CC 46-5 (Surface Active Agents and Detergents)  
 ST storage stability liq bleaching agent polyacrylamide;  
 ethylenebisacrylamide crosslinked acrylamide polymer  
 hydrogen peroxide  
 IT Detergents  
 (laundry, liquid; storage-stable liquid bleaching agents containing  
 crosslinked acrylamide polymers)  
 IT Bleaching agents  
 Crosslinking agents  
 (storage-stable liquid bleaching agents containing crosslinked  
 acrylamide polymers)  
 IT 89740-13-6  
 (bleaching activator; storage-stable liquid bleaching agents containing  
 crosslinked acrylamide polymers)  
 IT 97-90-5, Ethylene glycol dimethacrylate 110-26-9,  
 Methylenebisacrylamide 1464-69-3 2274-11-5, Ethylene glycol  
 diacrylate 13818-40-1, Cyanomethyl acrylate 20602-80-6,  
 Diacrylamide 41440-38-4, Vinyloxyethyl acrylate  
 (crosslinker; storage-stable liquid bleaching agents containing  
 crosslinked acrylamide polymers)  
 IT 863982-61-0P  
 (storage-stable liquid bleaching agents containing crosslinked  
 acrylamide polymers)  
 IT 7722-84-1, Hydrogen peroxide, uses 7732-18-5, Water, uses  
 (storage-stable liquid bleaching agents containing crosslinked  
 acrylamide polymers)

L61 ANSWER 7 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:405411 HCPLUS  
 DOCUMENT NUMBER: 142:468915  
 TITLE: Fragrance delivery system containing polymers or  
 oligomers for surface cleaners and conditioners  
 INVENTOR(S): Gamez-Garcia, Manuel  
 PATENT ASSIGNEE(S): Firmenich S. A., Switz.  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

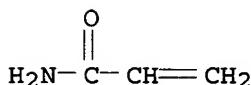
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005041918	A1	20050512	WO 2004-IB3544	20041028
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1711231	A1	20061018	EP 2004-769752	20041028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1874750	A	20061206	CN 2004-80032225	20041028
BR 2004015895	A	20070109	BR 2004-15895	20041028
US 2006210508	A1	20060921	US 2006-408179	20060421
MX 2006PA04704	A	20060705	MX 2006-PA4704	20060427
PRIORITY APPLN. INFO.:			US 2003-516548P	P 20031031
			WO 2003-IB4867	A 20031031
			WO 2003-IB304867	W 20031031
			WO 2004-IB3544	W 20041028

ED Entered STN: 12 May 2005

AB A fragrance delivery system is described consisting of a mixture of various polymers, oligomers and stabilizers capable of forming a surfactant complex gel dispersion when combined with a cleansing surfactant base and yielding high levels of fragrance deposition onto the skin, hair or other surface such as a textile, from a cleansing or softening consumer product comprising a micelle forming surfactant. The internal phase or dispersible phase of this surfactant complex gel dispersion (GLPPD) is made of a mixture of various immiscible polymers, oligomers and stabilizers forming a complex gel with the surfactant platform and whose ratio and composition are selected to dissolve preferentially a wide range of fragrance raw materials. The selection criteria are, first, that the fragrance should present a higher fragrance partitioning ratio into the surfactant complex gel phase than into the free micelles of the surfactant, second, that the surfactant complex gel should not be further solubilized by the free micelles, and third, that the polymer mixture selected should complex with the surfactant system. The external or dispersing phase of the GLPPD is made of a single cationic polymer or a mixture of cationic polymers that have been hydrated and associated with the surfactant to form a complex gel structure that cannot be further solubilized by the free micelles. For example, a body wash was prepared by mixing (i) 1.0 g of a fragrance composition containing limonene (15.5%), benzyl acetate (6.25%), cyclohexanol acetate (2.5%), 2-(1,1-dimethylethyl)-cyclohexanyl acetate (6.25%), 2-Me undecanal (2.75%), 4-(1,1-dimethylethyl)- $\alpha$ -Me benzenepropanal (18.75%), cyclopentaneacetic acid 3-oxo-2-pentyl-Me ester (29.25 %), and hexyl salicylate (18.75%); (ii) polymers for internal dispersible phase (fragrance carrier component) containing 1.0 g of isomyristyl alc.

dimer/IPDI (Monoderm MPI-1-14) or 1.0 g of hydrogenated castor oil/IPDI copolymer; (iii) polymer for external dispersing phase (fragrance deposit/delivery component) containing 0.5 g of acrylamidopropyltrimonium chloride (and) acrylamide copolymer (Salcare SC-60); (iv) 15.0 g of sodium laureth-2 sulfate as a primary surfactant; (v) 3.0 g of cocamidopropylbetaine as a secondary surfactant; (vi) 2.0 g of ethylene glycol distearate as a tertiary surfactant; (vii) water 75.4 g; and (viii) 0.1 g DMDM hydantoin as preservative.

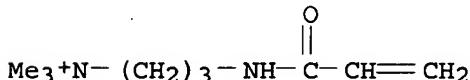
IT 79-06-1D, Acrylamide, polymers 75150-29-7, Salcare  
SC-60  
(fragrance delivery system containing polymers or oligomers able to complex with surfactants for surface cleaners and conditioners)  
RN 79-06-1 HCPLUS  
CN 2-Propenamide (CA INDEX NAME)



RN 75150-29-7 HCPLUS  
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propen-1-yl)amino]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

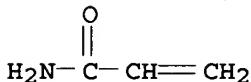
CRN 45021-77-0  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
CMF C3 H5 N O



IC ICM A61K007-50  
ICS C11D001-00  
CC 62-5 (Essential Oils and Cosmetics)  
Section cross-reference(s): 46  
IT Detergents  
(cleaning compns.; fragrance delivery system containing polymers or

oligomers able to complex with surfactants for surface cleaners and conditioners)

IT Detergents

(dishwashing; fragrance delivery system containing polymers or oligomers able to complex with surfactants for surface cleaners and conditioners)

IT Detergents

(laundry; fragrance delivery system containing polymers or oligomers able to complex with surfactants for surface cleaners and conditioners)

IT 60-12-8, Phenylethyl alcohol 79-06-1D, Acrylamide, polymers  
 80-54-6, Lilial 104-67-6 110-41-8, 2-Methyl undecanal 115-83-3,  
 Pentaerythrityl tetrastearate 138-86-3, Limonene 140-11-4, Benzyl acetate 622-45-7, Cyclohexanol acetate 627-83-8, Ethylene glycol distearate 1222-05-5, Galaxolide 2050-08-0, Amyl salicylate 3234-85-3, Myristyl myristate 4098-71-9D, Isophorone diisocyanate, oligomers and polymers 6259-76-3, Hexyl salicylate 8007-35-0, Terpinyl acetate 9002-98-6, Lupasol PS 9004-82-4, Sodium laureth-2 sulfate 17511-60-3 18871-14-2, Jasmal 21722-83-8 24851-98-7 26062-79-3, PolyDADMAC 26161-33-1, Salcare SC 95 37309-58-3D, Polydecene, hydrogenated 53219-21-9, Dihydromyrcenol 54464-57-2, Iso-E Super 65443-14-3 75150-29-7, Salcare SC-60 81859-24-7, Polyquaternium 10 154213-89-5, Superfloc C 498 423773-57-3, Habanolide 473664-54-9, Salcare SC 96 632332-89-9, Polyderm PPI-CO-H 717143-65-2, Puresyn 4 851479-50-0, Superfloc C 583 851479-73-7, Lupamin 9096 851482-81-0, Polyfix JPN 851485-01-3, Monoderm MPI 1-14

(fragrance delivery system containing polymers or oligomers able to complex with surfactants for surface cleaners and conditioners)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 8 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1014430 HCAPLUS

DOCUMENT NUMBER: 141:425137

TITLE: Polymer particles with good use of sense for cosmetics

INVENTOR(S): Osumi, Takahiro; Nakamura, Sugiko

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004331906	A	20041125	JP 2003-132771	20030512
PRIORITY APPLN. INFO.:			JP 2003-132771	20030512

ED Entered STN: 25 Nov 2004

AB The present invention relates to crosslinked polymer particles containing elements (CR1R3CR2R4), wherein R1, R2, R3, R4 = H or C1-3 alkyl (at least one of them may have the connecting groups and is C8-30 linear or branched alkyl or alkenyl group and one of them may have the connecting groups and is ionic or oxyalkylene groups). Thus, DMAPAA-Q 3-acrylamidopropyltrimethylammonium chloride 14.5, DMAA N,N-dimethylacrylamide 50.0, and NK Ester 14G 0.02 g were polymerized in

the presence of 1.5 g Ryoto Sugar Ester S 770 and 0.2 g Adeka Reasoap ER 10 to give polymer particles with weight average particle diameter 2.7  $\mu\text{m}$ , 0.5 g of which was mixed with potassium monoalkylphosphate 10, polyethylene glycol alkyl ether sodium sulfate 5, monofatty acid glyceride 5, alkyl glucoside 5, and ethylene glycol distearate 5%, other additives, and balance water to give a detergent with pH 6.2, good foam properties and skin contact feeling.

IT 796882-01-4P 796882-02-5P

(polymer particles with good use of sense for cosmetics)

RN 796882-01-4 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with Adeka Reasoap ER 10, N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 777945-65-0

CMF Unspecified

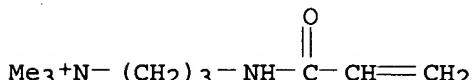
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 45021-77-0

CMF C9 H19 N2 O . Cl



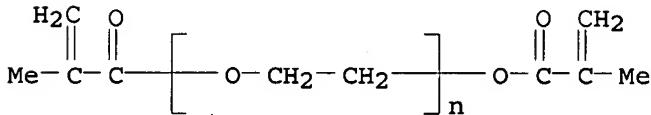
● Cl<sup>-</sup>

CM 3

CRN 25852-47-5

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>

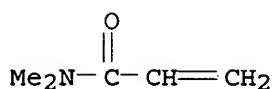
CCI PMS



CM 4

CRN 2680-03-7

CMF C<sub>5</sub> H<sub>9</sub> N O



RN 796882-02-5 HCPLUS

CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with Adeka Reasoap ER 10, N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 777945-65-0

CMF Unspecified

CCI MAN

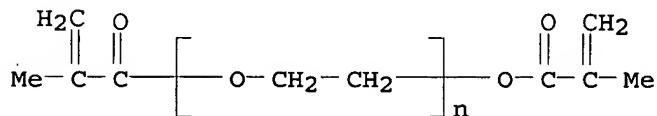
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 25852-47-5

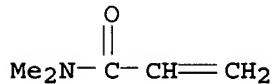
CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>

CCI PMS



CM 3

CRN 2680-03-7

CMF C<sub>5</sub> H<sub>9</sub> N O

CM 4

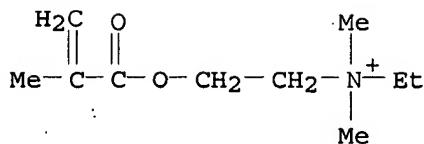
CRN 13223-03-5

CMF C<sub>10</sub> H<sub>20</sub> N O<sub>2</sub> . C<sub>2</sub> H<sub>5</sub> O<sub>4</sub> S

CM 5

CRN 48063-69-0

CMF C<sub>10</sub> H<sub>20</sub> N O<sub>2</sub>



CM 6

CRN 48028-76-8  
CMF C2 H5 O4 S

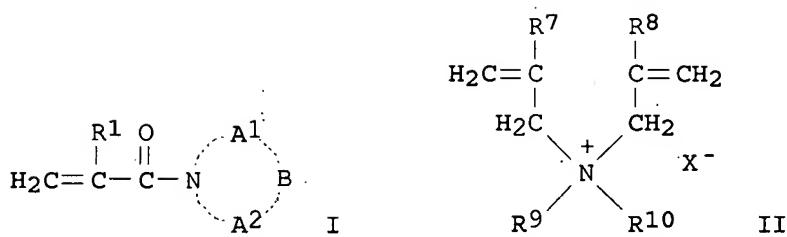
$$\text{Et}-\text{O}-\text{SO}_3^-$$

IC ICM C08F020-34  
IC S C08F012-26; C08F020-28; C08F020-56; C08F020-58; C08F020-60;  
C08F026-04; C08F290-06  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s) : 62  
IT Detergents  
(skin cleansers; polymer particles with good use of sense for cosmetics)  
IT 796882-01-4P 796882-02-5P 796882-04-7P  
796882-05-8P  
(polymer particles with good use of sense for cosmetics)

L61 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:928792 HCAPLUS  
DOCUMENT NUMBER: 141:397314  
TITLE: Cleaning compositions with good detergency,  
, foamability, and conditioning effect  
INVENTOR(S): Yumoto, Masaharu; Horinishi, Nobutaka  
PATENT ASSIGNEE(S): Kao Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004307700	A	20041104	JP 2003-104974	20030409
PRIORITY APPLN. INFO.:				

ED      Entered STN:  04 Nov 2004  
GI



**AB** Title compns. comprise (A) thickeners composed of cationic copolymers obtained by radical polymerization of  $\geq 1$  nonionic vinyl monomer selected from  $\text{CH}_2:\text{CR}_1\text{C}(:\text{O})\text{NR}_2\text{R}_3$  and I,  $\geq 1$  cationic vinyl monomer selected from  $\text{CH}_2:\text{CR}_1\text{C}(:\text{O})\text{YZN}+\text{R}_4\text{R}_5\text{R}_6\text{X}^-$  and II, and  $\geq 1$  crosslinkable vinyl monomer containing  $\geq 2$  groups selected from vinyl, acryloyl, methacryloyl, and allyl groups and (B) amide alcs.  $\text{R}_1\text{C}(:\text{O})\text{NR}_1\text{R}_2\text{OH}$ , wherein  $\text{R}_1, \text{R}_7, \text{R}_8 = \text{H}$  or methyl;  $\text{R}_2, \text{R}_3 = \text{H}$ , linear or branched C<sub>1-4</sub> alkyl or alkenyl;  $\text{R}_4, \text{R}_5 = \text{C}_1\text{-4}$  alkyl or alkenyl;  $\text{R}_6 = \text{H}$  or C<sub>1-4</sub> alkyl or alkenyl;  $\text{R}_9, \text{R}_{10} = \text{H}$  or C<sub>1-4</sub> alkyl;  $\text{R}_1\text{CO} = \text{C}_6\text{-24}$  (hydroxy-containing) (un)saturated acyl;  $\text{R}_{11} = \text{C}_1\text{-3}$  linear or branched alkyl;  $\text{R}_{12} = \text{C}_1\text{-6}$  linear or branched alkylene or C<sub>2-6</sub> linear or branched alkenyl;  $\text{A}_1, \text{A}_2 = (\text{CH}_2)_n$ ;  $\text{B} = \text{O}$  or  $\text{CH}_2$ ;  $\text{Y} = \text{O}, \text{NH}, \text{CH}_2$ , or  $\text{OCH}_2\text{CH}(\text{OH})$ ;  $\text{Z} = \text{C}_1\text{-4}$  linear or branched alkylene (if  $\text{Y} = \text{CH}_2$ , then C<sub>0-3</sub> alkylene);  $\text{X} =$  conjugated base of acid, halogen atom, or C<sub>1-4</sub> alkylsulfate; and  $n = 2\text{-}6$  integer. Thus, N-ethyl-N,N-dimethyl-2-methacryloyloxyethylammonium ethylsulfate 23.85, N,N-dimethylacrylamide 71.37, and NK 9G polyethylene glycol dimethacrylate 0.0429 g were polymerized to give a cationic polymer with viscosity 2.5 at shear rate 1 s<sup>-1</sup> and 0.5 at shear rate 10 s<sup>-1</sup>, and tan  $\delta$  0.98 at strain 1% and 2.28 at strain 500%, 0.5% of which was mixed with palm kernel oil N-methylethanamide 3, Lunac L 55 9, Lunac L 98 6.8, Lunac MY 98 2.3, Aminon 3201M ethylene glycol distearate 3, glycerin 3, and 48% potassium hydroxide 9.5, perfume, and balance water to give a cleaning composition with good **detergency**, foamability, and conditioning effect.

**IT** 269735-77-5P

(NK 23G, NK 14G, thickener; cleaning compns. with good **detergency**, foamability, and conditioning effect)

**RN** 269735-77-5 HCPLUS

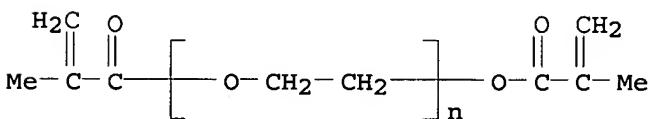
**CN** Ethanaminium, N-ethyl-N,N-dimethyl-2-[[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, ethyl sulfate (1:1), polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propen-1-yl)- $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]poly(oxy-1,2-ethanediyl) (CA INDEX NAME)

**CM** 1

**CRN** 25852-47-5

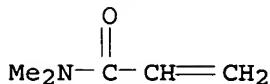
**CMF** (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>

**CCI** PMS



CM 2

CRN 2680-03-7  
 CMF C5 H9 N O

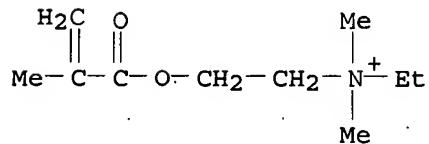


CM 3

CRN 13223-03-5  
 CMF C10 H20 N O2 . C2 H5 O4 S

CM 4

CRN 48063-69-0  
 CMF C10 H20 N O2



CM 5

CRN 48028-76-8  
 CMF C2 H5 O4 S

 $\text{Et}-\text{O}-\text{SO}_3^-$ 

IT 218129-29-4P 218129-36-3P 269735-80-0P  
 269739-80-2P 269739-81-3P 269739-82-4P  
 785783-93-9P 785783-94-0P

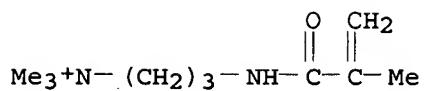
(thickener; cleaning compns. with good **detergency**,  
 foamability, and conditioning effect)

RN 218129-29-4 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

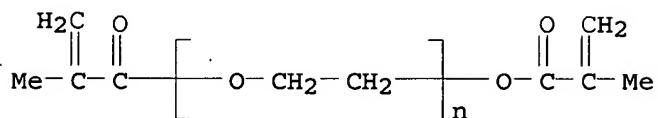
CRN 51410-72-1  
 CMF C10 H21 N2 O . Cl



● Cl<sup>-</sup>

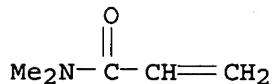
CM 2

CRN 25852-47-5  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>  
 CCI PMS



CM 3

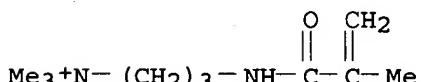
CRN 2680-03-7  
 CMF C<sub>5</sub> H<sub>9</sub> N O



RN 218129-36-3 HCPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-chloride, polymer with N-(1,1-dimethylethyl)-2-propenamide, N,N-dimethyl-2-propenamide and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

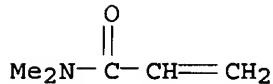
CRN 51410-72-1  
 CMF C<sub>10</sub> H<sub>21</sub> N<sub>2</sub> O . Cl



● Cl<sup>-</sup>

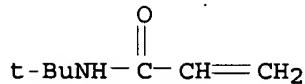
CM 2

CRN 2680-03-7  
 CMF C5 H9 N O



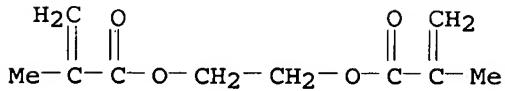
CM 3

CRN 107-58-4  
 CMF C7 H13 N O



CM 4

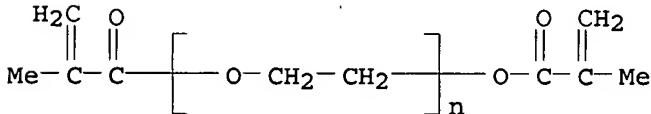
CRN 97-90-5  
 CMF C10 H14 O4



RN 269735-80-0 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

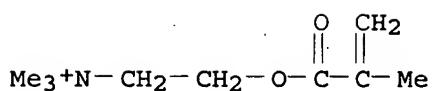
CM 1

CRN 25852-47-5  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>8</sub> H<sub>10</sub> O<sub>3</sub>  
 CCI PMS



CM 2

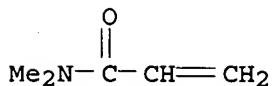
CRN 5039-78-1  
 CMF C<sub>9</sub> H<sub>18</sub> N O<sub>2</sub>. Cl



● Cl<sup>-</sup>

CM 3

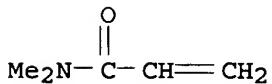
CRN 2680-03-7  
CMF C5 H9 N O



RN 269739-80-2 HCAPLUS  
CN Ethanaminium, N-éthyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with N,N-dimethyl-2-propenamide and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

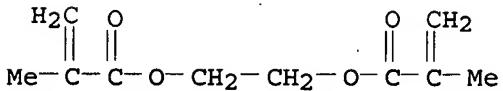
CM 1

CRN 2680-03-7  
CMF C5 H9 N O



CM 2

CRN 97-90-5  
CMF C10 H14 O4



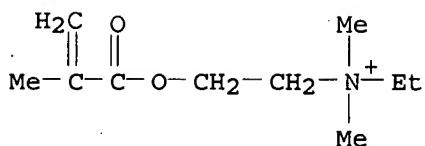
CM 3

CRN 13223-03-5  
CMF C10 H20 N O2 . C2 H5 O4 S

CM 4

CRN 48063-69-0

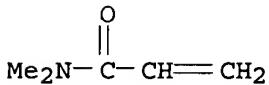
CMF C10 H20 N O2



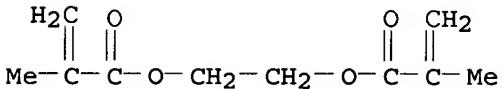
CM 5

CRN 48028-76-8  
CMF C2 H5 O4 S $\text{Et}-\text{O}-\text{SO}_3^-$ RN 269739-81-3 HCAPLUS  
CN 1-Propanaminium, N-ethyl-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, ethyl sulfate, polymer with N,N-dimethyl-2-propenamide and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7  
CMF C5 H9 N O

CM 2

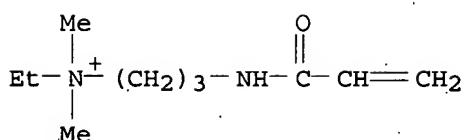
CRN 97-90-5  
CMF C10 H14 O4

CM 3

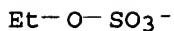
CRN 117908-82-4  
CMF C10 H21 N2 O . C2 H5 O4 S

CM 4

CRN 117908-81-3  
CMF C10 H21 N2 O



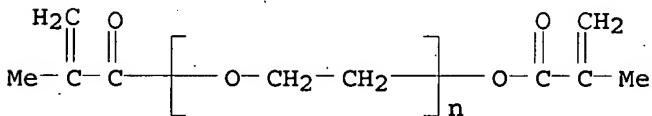
CM 5

CRN 48028-76-8  
CMF C2 H5 O4 S

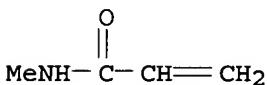
RN 269739-82-4 HCPLUS

CN 1-Propanaminium, N-ethyl-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, ethyl sulfate, polymer with  $\alpha$ - (2-methyl-1-oxo-2-propenyl)-  $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and N-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 25852-47-5  
CMF (C2 H4 O)n C8 H10 O3  
CCI PMS

CM 2

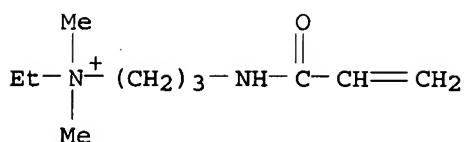
CRN 1187-59-3  
CMF C4 H7 N O

CM 3

CRN 117908-82-4  
CMF C10 H21 N2 O . C2 H5 O4 S

CM 4

CRN 117908-81-3  
CMF C10 H21 N2 O



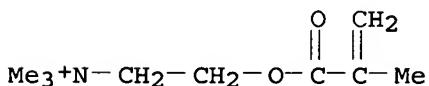
CM 5

CRN 48028-76-8  
CMF C2 H5 O4 S $\text{Et}-\text{O}-\text{SO}_3^-$ 

RN 785783-93-9 HCPLUS

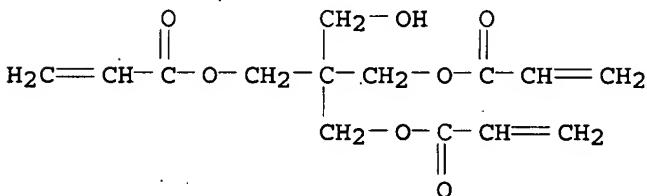
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide and 2-(hydroxymethyl)-2-[[1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1  
CMF C9 H18 N O2 Cl

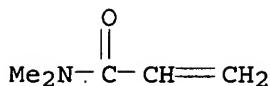
● Cl-

CM 2

CRN 3524-68-3  
CMF C14 H18 O7

CM 3

CRN 2680-03-7  
CMF C5 H9 N O



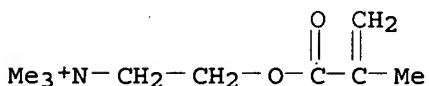
RN 785783-94-0 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N-(1,1-dimethylethyl)-2-propenamide and 2-(hydroxymethyl)-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . Cl

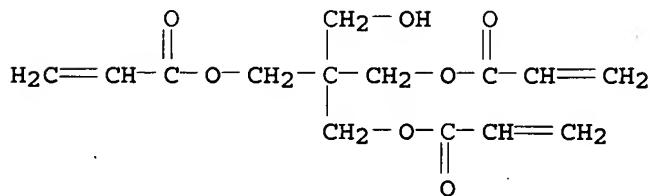


● Cl-

CM 2

CRN 3524-68-3

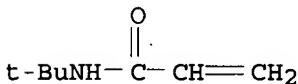
CMF C14 H18 O7



CM 3

CRN 107-58-4

CMF C7 H13 N O



IC ICM C11D003-37

ICS A61K007-075; A61K007-50; C08F220-04; C08F220-34; C08F220-54;  
C09K003-00; C11D001-52

CC 46-6 (Surface Active Agents and Detergents)  
 Section cross-reference(s) : 62

ST cleaning compn **detergency** foamability conditioning effect; ethyldimethylmethacryloyloxyethylammonium ethylsulfate dimethylacrylamide polyethylene glycol dimethacrylate copolymer; cationic copolymer palm kernel oil methylethanolamide **detergent** compn

IT Polyoxyalkylenes, uses  
 (acrylic, thickeners; cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT Polyelectrolytes  
 (cationic; cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT Detergents  
 Shampoos  
 Thickening apparatus  
 (cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT Coconut oil  
 Palm kernel oil  
 (methylethanolamide derivs.; cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT Quaternary ammonium compounds, uses  
 (polymers, thickeners; cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT 269735-77-5P  
 (NK 23G, NK 14G, thickener; cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT 544-63-8P, Lunac MY 98, uses  
 (cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT 109-83-1D, N-Methylethanolamine, fatty acid amides 35179-80-7  
 (cleaning compns. with good **detergency**, foamability, and conditioning effect)

IT 218129-29-4P 218129-36-3P 269735-78-6P  
 269735-80-0P 269739-80-2P 269739-81-3P  
 269739-82-4P 785783-93-9P 785783-94-0P  
 (thickener; cleaning compns. with good **detergency**, foamability, and conditioning effect)

L61 ANSWER 10 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:856797 HCPLUS  
 DOCUMENT NUMBER: 141:350862  
 TITLE: Reactive liquid polymer crosslinking agent and process for preparation  
 INVENTOR(S): Lazar, Warren G.; Clark, James A.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 13,164, abandoned.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004200993	A1	20041014	US 2004-833816	20040427
US 2003168629	A1	20030911	US 2001-13164	20011210
PRIORITY APPLN. INFO.:			US 2001-13164	B2 20011210

ED Entered STN: 18 Oct 2004

AB A reactive liquid crosslinking agent for use in the preparation of polymeric substances. The crosslinking agent comprises a substituted 1,3,5-triazine reacted with H<sub>2</sub>O, an acid alkyl sulfonate and/or phosphonate and a solidifying modifier containing an hydroxyl functional group to form a substituted 1,3,5-triazine hydrate. The reactive liquid polymer crosslinking agent has a solids content between 20-99% solids. The reactive liquid crosslinking agents (RLPC's) are useful as modifiers in the preparation of polymeric compds. which are suitable for 1-component self-crosslinking adhesives, coatings and polymers used in optics, textiles, composites, casting and molding. RLPC systems containing from 1-30% RLPC provide fast single package thermosetting polymeric compds. with enhanced properties such as chemical, heat and abrasion resistance.

IT 391201-84-6, Acrylamide-2-methacryloxyethyltrimethylammonium bromide copolymer

(reactive liquid polymer crosslinking agent)

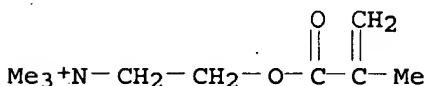
RN 391201-84-6 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, bromide (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 56727-55-0

CMF C9 H18 N O2 . Br

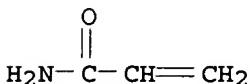


● Br<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C09K003-00

INCL 252182130

CC 37-6 (Plastics Manufacture and Processing)

IT Crosslinking agents

(modified triazine; reactive liquid polymer crosslinking agent)

IT 9002-83-9, Poly(chlorotrifluoroethylene) 9002-84-0,  
 Poly(tetrafluoroethylene) 9002-86-2, Poly(vinyl chloride)  
 9002-88-4, Polyethylene 9002-89-5, Poly(vinyl alcohol) 9002-98-6  
 9003-01-4, Poly(acrylic acid) 9003-03-6, Poly(acrylic acid) ammonium  
 salt 9003-04-7, Poly(acrylic acid) sodium salt 9003-05-8,  
 Polyacrylamide 9003-06-9, Acrylamide-acrylic acid copolymer

9003-07-0, Polypropylene 9003-17-2, Polybutadiene 9003-18-3,  
 Butadiene/acrylonitrile copolymer 9003-20-7, Poly(vinyl acetate)  
 9003-27-4, Polyisobutylene 9003-32-1, Poly(ethyl acrylate)  
 9003-39-8, Poly(vinyl pyrrolidone) 9003-49-0, Poly(n-butyl acrylate)  
 9003-53-6, Polystyrene 9003-54-7, Poly(styrene-acrylonitrile)  
 9003-55-8, Styrene/butadiene copolymer 9003-56-9,  
 Acrylonitrile-butadiene-styrene copolymer 9003-70-7,  
 Poly(styrene/divinyl benzene) 9004-74-4, Poly(ethylene  
 glycol)monomethyl ether 9005-08-7, Poly(ethylene glycol) distearate  
 9005-09-8, Vinyl chloride/vinyl acetate/maleic acid copolymer  
 9005-64-5, Poly(oxyethylene)sorbitan monolaurate 9008-66-6  
 9010-75-7, Vinylidene fluoride-chlorotrifluoroethylene copolymer  
 9010-76-8, Vinylidene chloride/acrylonitrile copolymer 9010-77-9,  
 Ethylene/acrylic acid copolymer 9010-98-4, Poly(2-chloro-1,3-  
 butadiene) 9011-13-6, Poly(styrene/maleic anhydride) 9011-14-7,  
 PMMA 9011-15-8, Poly(isobutyl methacrylate) 9011-16-9, Vinyl  
 methyl ether/maleic anhydride copolymer 9016-00-6D,  
 Poly(dimethylsiloxane), methylsilyl-terminated 9016-06-2,  
 Poly(2-vinylpyridine-n-oxide) 9016-87-9, Poly[methylene(polyphenyl)  
 isocyanate] 9017-27-0 9017-40-7, 4-Vinylpyridine divinylbenzene  
 copolymer 9080-79-9 24936-41-2, Poly(4-methylstyrene)  
 24936-50-3, Poly(4-bromostyrene) 24936-53-6, Poly(p-iodostyrene)  
 24937-72-2, Poly(maleic anhydride) 24937-78-8, Ethylene-vinyl  
 acetate copolymer 24937-79-9, Poly(vinylidene fluoride)  
 24938-67-8, Poly(2,6-dimethyl-1,4-phenylene oxide) 24968-99-8,  
 Poly(vinyl cinnamate) 24979-70-2, Poly(4-vinylphenol) 24979-82-6,  
 Poly(n-propyl acrylate) 24980-41-4, Polycaprolactone 24991-47-7,  
 Poly(4-chlorostyrene) 24991-55-7, Polyethylene glycol dimethyl ether  
 25014-12-4, Polymethacrylamide 25014-15-7, Poly(2-vinylpyridine)  
 25014-31-7 25034-86-0, Poly(styrene/methylmethacrylate)  
 25037-45-0, Poly(bisphenol a carbonate) 25038-53-3 25038-54-4,  
 Polycaprolactam, uses 25038-87-3, Poly(methyl vinyl ketone)  
 25053-27-4, Poly(vinylsulfonic acid) sodium salt 25067-05-4,  
 Poly(glycidyl methacrylate) 25067-34-9, Ethylene-vinyl alcohol  
 copolymer 25067-59-8, Poly(n-vinylcarbazole) 25068-14-8,  
 Polyacrolein 25068-26-2, Poly(4-methyl-1-pentene) 25085-35-2,  
 Ethyl acrylate/acrylic acid copolymer 25085-53-4 25085-83-0,  
 Poly(benzyl methacrylate) 25086-15-1, Methyl methacrylate-  
 methacrylic acid copolymer 25086-42-4, Poly(4-aminostyrene)  
 25086-89-9, n-Vinylpyrrolidone-vinyl acetate copolymer 25087-26-7,  
 Poly(methacrylic acid) 25103-87-1, Poly(1,4-butanediol adipate)  
 25119-64-6, Poly(itaconic acid) 25119-83-9, Butyl acrylate/acrylic  
 acid copolymer 25134-01-4, Poly(2,6-dimethyl-1,4-phenylene oxide)  
 25154-86-3 25189-00-8, Poly(tert-butyl methacrylate) 25189-55-3,  
 Poly(n-isopropylacrylamide) 25189-84-8, Poly(acryloyl chloride)  
 25190-06-1, Poly(tetramethylene ether glycol) 25212-86-6,  
 Poly(furfuryl alcohol) 25213-34-7 25232-41-1, Poly(4-  
 vinylpyridine) 25233-30-1, Polyaniline 25248-42-4,  
 Polycaprolactone 25249-16-5, Poly(2-hydroxyethyl methacrylate)  
 25266-02-8, Maleic anhydride-1-octadecene copolymer 25301-00-2,  
 Poly(acrylic anhydride) 25322-69-4, Poly(propylene glycol)  
 25608-33-7, Methyl methacrylate-butyl methacrylate copolymer  
 25609-94-3, Poly(2-hydroxy-3-methacryloxypropyltrimethylammonium  
 chloride) 25639-21-8, Poly(octadecyl methacrylate) 25655-35-0,  
 Butadiene/maleic anhydride copolymer 25703-79-1,  
 Poly(2-hydroxypropyl methacrylate) 25736-86-1, Poly(ethylene glycol)  
 monomethacrylate 25805-17-8, Poly(2-ethyl-2-oxazoline) 25852-47-5,  
 Poly(ethylene glycol) dimethacrylate 25852-49-7, Poly(propylene  
 glycol) dimethacrylate 25988-32-3, Poly(methyl isopropenyl ketone)  
 25988-63-0 26009-03-0, Poly(glycolic acid) 26062-79-3;

Poly(diallyl dimethylammonium chloride) 26099-09-2, Poly(maleic acid) 26100-51-6, Poly(dl-lactic acid) 26124-68-5, Poly(glycolic acid) 26142-30-3, Poly(propylene glycol) diglycidyl ether 26161-42-2 26246-92-4, Poly(lauryl acrylate) 26335-74-0, Poly(isobutyl acrylate) 26403-72-5, Poly(ethylene glycol) diglycidyl ether 26570-48-9, Poly(ethylene glycol) diacrylate 26655-84-5, 4-Methylstyrene/styrene copolymer 26655-94-7, Poly(isopropyl methacrylate) 26746-07-6, Poly(hexyl isocyanate) 26780-50-7 26915-72-0, Poly(ethylene glycol) monomethyl ether monomethacrylate 26937-45-1, Poly(methacryloyl chloride) 28474-30-8 28551-45-3, Poly(amyl methacrylate) 28805-15-4, Poly(methacrylic acid), ammonium salt 29435-48-1, Poly[(-)-3-hydroxybutyric acid] 29471-77-0, Poly(2-vinyl-1-methylpyridinium bromide) 29500-86-5, Poly(decyl acrylate) 29690-74-2 29792-49-2, Poly(vinylamine) hydrochloride 30581-59-0 30604-81-0, Polypyrrole 30729-36-3, Poly(4-hydroxybenzoic acid) 31245-56-4 31693-08-0, 2-Hydroxyethyl methacrylate-methacrylic acid copolymer 31900-57-9D, Poly(dimethylsiloxane), methylsilyl-terminated 32131-17-2, Poly(hexamethyleneadipamide), uses 34801-99-5, Poly(vinyl ferrocene) 39420-45-6, Poly(propylene glycol) monomethacrylate 50851-57-5, Poly(styrenesulfonic acid) 54193-36-1, Poly(methacrylic acid), sodium salt 62962-69-0 67665-18-3 68912-04-9 71550-12-4, Poly(allylamine hydrochloride) 78274-32-5 82063-35-2 84928-92-7, Poly(3-methylthiophene) 86846-19-7, Acrylamidoxime-divinylbenzene copolymer 104934-51-2, Poly(3-octylthiophene) 104983-61-1 105729-79-1, Styrene-isoprene block copolymer 126969-21-9 156309-06-7, Dimethylsiloxane-ethylene oxide block copolymer 178402-40-9 184713-15-3 226984-81-2, Butyl acrylate-2-methacryloyloxyethyltrimethylammonium bromide copolymer 391201-84-6, Acrylamide-2-methacryloyloxyethyltrimethylammonium bromide copolymer 776304-98-4  
(reactive liquid polymer crosslinking agent)

L61 ANSWER 11 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:718412 HCPLUS

DOCUMENT NUMBER: 141:245542

TITLE: Composite materials comprising supported porous gels

INVENTOR(S): Childs, Ronald F.; Filipe, Carlos; Ghosh, Raja; Mika, Alicja M.; Zhou, Jinsheng; Komkova, Elena N.; Kim, Marcus; Dey, Tapan K.

PATENT ASSIGNEE(S): McMaster University, Can.

SOURCE: PCT Int. Appl., 146 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004073843	A1	20040902	WO 2004-CA120	20040129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,				

CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004212641	A1	20040902	AU 2004-212641	20040129
CA 2514471	A1	20040902	CA 2004-2514471	20040129
EP 1617936	A1	20060125	EP 2004-706115	20040129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006519273	T	20060824	JP 2006-501402	20040129
US 2004203149	A1	20041014	US 2004-769953	20040202
IN 2005DN03245	A	20070105	IN 2005-DN3245	20050721
PRIORITY APPLN. INFO.:				
			US 2003-447730P	P 20030219
			WO 2004-CA120	A 20040129

ED Entered STN: 02 Sep 2004

AB This invention relates to a composite material that comprises a support member that has a plurality of pores extending through the support member and, located in the pores of the support member, and filling the pores of the support member, a macroporous cross-linked gel. The invention also relates to a process for preparing the composite material described above, and to its use. The composite material is suitable, for example, for separation of substances, for example by filtration or adsorption, including chromatog., for use as a support in synthesis or for use as a support for cell growth.

IT 749269-10-1DP, UV-crosslinked

(composite materials comprising supported porous crosslinked gels for use in sepn.)

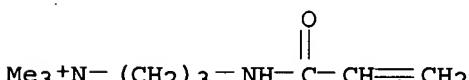
RN 749269-10-1 HCPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with N,N'-methylenebis[2-propenamide], 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

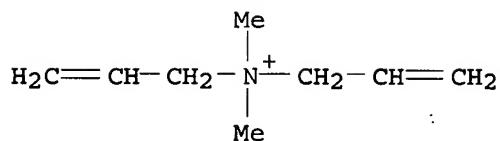


● Cl<sup>-</sup>

CM 2

CRN 7398-69-8

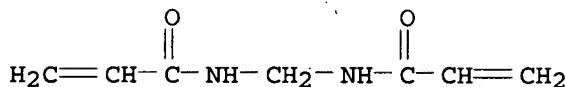
CMF C8 H16 N . Cl



● Cl<sup>-</sup>

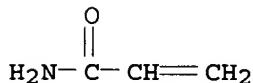
CM 3

CRN 110-26-9  
CMF C7 H10 N2 O2



CM 4

CRN 79-06-1  
CMF C3 H5 N O



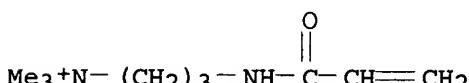
IT 75150-29-7D, Acrylamide-3-acrylamidopropyltrimethylammonium chloride copolymer, crosslinked  
(gel; composite materials comprising supported porous crosslinked gels for use in sepn.)

RN 75150-29-7 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propen-1-yl)amino]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 45021-77-0  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
CMF C3 H5 N O

IC ICM B01D067-00  
 ICS B01D069-10; B01D069-14; B01D069-12; B01D015-08; B01J020-32;  
 G01N030-48

CC 48-1 (Unit Operations and Processes)  
 Section cross-reference(s): 9, 35, 80

IT Crosslinking

**Crosslinking agents**

(photochem.; composite materials comprising supported porous crosslinked gels for use in sepn.)

IT Crosslinking

**Crosslinking agents**

**Polymerization catalysts**

(radical; composite materials comprising supported porous crosslinked gels for use in sepn.)

IT 25034-58-6DP, Acrylamide-N,N'-methylenebisacrylamide copolymer,  
 UV-crosslinked 26427-01-0P 26590-05-6DP, Acrylamide-diallyldimethylammonium chloride copolymer, UV-crosslinked  
 29299-74-9DP, Diallyldimethylammonium chloride-N,N'-methylenebisacrylamide copolymer, UV-crosslinked 29856-78-8DP,  
 UV-crosslinked 31743-77-8DP, Ethylene dimethacrylate-glycidyl methacrylate copolymer, UV-crosslinked 31921-44-5DP,  
 Acrylamide-diallyldimethylammonium chloride-N,N'-methylenebisacrylamide copolymer, UV-crosslinked 70144-13-7DP,  
 Acrylamide-2-acrylamido-2-methyl-1-propanesulfonic acid-N,N'-methylenebisacrylamide copolymer, UV-crosslinked  
 124924-40-9DP, 2-Acrylamido-2-methyl-1-propanesulfonic acid-N,N'-methylenebisacrylamide copolymer, UV-crosslinked  
 131649-12-2DP, UV-crosslinked 259743-19-6DP, UV-crosslinked 749269-08-7DP, UV-crosslinked 749269-09-8DP, UV-crosslinked  
**749269-10-1DP**, UV-crosslinked 749269-11-2P  
 (composite materials comprising supported porous crosslinked gels for use in sepn.)

IT 9003-05-8D, Poly(acrylamide), crosslinked 9003-06-9D,  
 Acrylamide-Acrylic acid copolymer, crosslinked 9003-39-8D,  
 Poly(vinylpyrrolidone), crosslinked 25085-03-4D,  
 Acrylamide-methacrylic acid copolymer, crosslinked 25322-68-3D,  
 Poly(ethylene oxide), crosslinked 26590-05-6D, Acrylamide-diallyldimethylammonium chloride copolymer, crosslinked 27015-38-9D,  
 crosslinked 28062-44-4D, Acrylic acid-N-vinylpyrrolidinone copolymer, crosslinked 28500-83-6D, crosslinked 30326-74-0D,  
 Methacrylic acid-N-vinylpyrrolidinone copolymer, crosslinked 40623-73-2D, Acrylamide-AMPS copolymer, crosslinked 57123-13-4D,  
 2-Acrylamido-2-methylpropanesulfonic acid-N-vinylpyrrolidone copolymer, crosslinked 61469-23-6, Acrylamide-2-methylpropanesulfonic acid-N-isopropylacrylamide copolymer 62487-95-0D, Poly(hydroxymethyl acrylate), crosslinked  
**75150-29-7D**, Acrylamide-3-acrylamidopropyltrimethylammonium chloride copolymer, crosslinked 151954-97-1D, N-Isopropylacrylamide-

methacrylic acid copolymer, crosslinked 163530-57-2D, crosslinked (gel; composite materials comprising supported porous crosslinked gels for use in sepn.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:681431 HCAPLUS  
 DOCUMENT NUMBER: 141:191418  
 TITLE: Composition and method for preparing cationic polyelectrolyte thickeners  
 INVENTOR(S): Braun, Olivier; Mallo, Paul; Rolland, Herve  
 PATENT ASSIGNEE(S): Societe D'Exploitation De Produits Pour Les Industries Chimiques (Seppic), Fr.  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

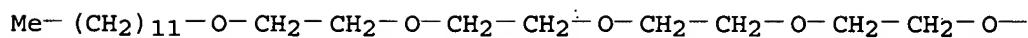
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004162405	A1	20040819	US 2004-777848	20040212
US 7015279	B2	20060321		
FR 2851251	A1	20040820	FR 2003-1723	20030213
FR 2851251	B1	20050408		
EP 1449862	A1	20040825	EP 2004-300043	20040126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006111509	A1	20060525	US 2005-321399	20051229
PRIORITY APPLN. INFO.:			FR 2003-1723	A 20030213
			US 2004-777848	A3 20040212

ED Entered STN: 20 Aug 2004  
 AB Linear or crosslinked cationic polyelectrolytes are obtained by copolyrn. of at least one cationic monomer with at least one neutral monomer and at least one nonionic surfactant monomer, self-reversible invert latex. The cationic polyelectrolytes are useful as a thickener for cosmetic or pharmaceutical compns., as a thickener for printing pastes for the textile industry, as a thickener for industrial or household detergents, as additives for the assisted recovery of petroleum, as a rheol. modifier for drilling mud. A cationic polyelectrolyte was prepared from acrylamide, -acrylamidopropyltrimethylammonium chloride, methylene bisacrylamide, and tetraethoxylated lauryl acrylate.  
 IT 738616-23-4P 738616-24-5P  
 (composition and method for preparing cationic polyelectrolyte thickeners)  
 RN 738616-23-4 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N,N'-methylenebis[2-propenamide], 2-propenamide and 3,6,9,12-tetraoxatetracos-1-yl 2-propenoate (9CI) (CA INDEX NAME)

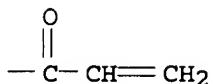
CM 1

CRN 225923-30-8  
 CMF C23 H44 O6

PAGE 1-A

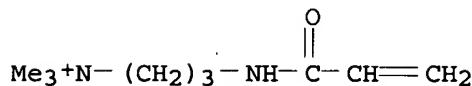


PAGE 1-B



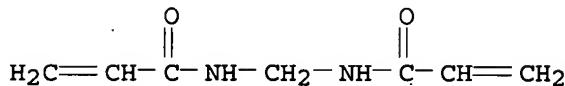
CM 2

CRN 45021-77-0  
 CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

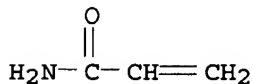
CM 3

CRN 110-26-9  
 CMF C7 H10 N2 O2



CM 4

CRN 79-06-1  
 CMF C3 H5 N O



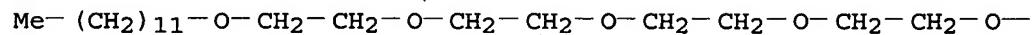
RN 738616-24-5 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2-

propenamide, 2-propenamide and 3,6,9,12-tetraoxatetracos-1-yl  
2-propenoate (9CI) (CA INDEX NAME)

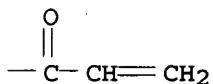
CM 1

CRN 225923-30-8  
CMF C23 H44 O6

PAGE 1-A

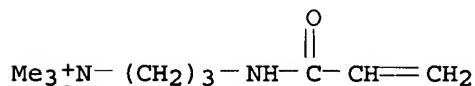


PAGE 1-B



CM 2

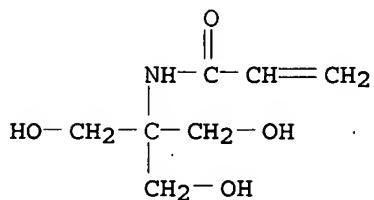
CRN 45021-77-0  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

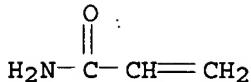
CM 3

CRN 13880-05-2  
CMF C7 H13 N O4



CM 4

CRN 79-06-1  
CMF C3 H5 N O



IC ICM C08F026-08  
INCL 526264000; X52-630.31; X52-631.9; X52-480.1  
CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 46, 62, 63  
IT Cosmetics  
Detergents  
Drug delivery systems  
(thickeners for; composition and method for preparing cationic polyelectrolyte thickeners)  
IT 738616-23-4P 738616-24-5P  
(composition and method for preparing cationic polyelectrolyte thickeners)  
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

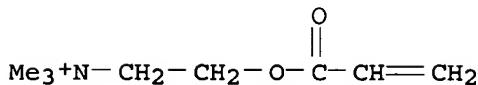
L61 ANSWER 13 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:516590 HCPLUS  
DOCUMENT NUMBER: 141:248142  
TITLE: Development and testing of a multichannel biosensor systems for determination of nitrification inhibitors and substrates in sewage  
AUTHOR(S): Baumeister, Frank  
CORPORATE SOURCE: Forschungs- und Entwicklungsinstitut, Industrie- und Siedlungswasserwirtschaft sowie Abfallwirtschaft E. V., Stuttgart, Germany  
SOURCE: Stuttgarter Berichte zur Siedlungswasserwirtschaft (2004), 177, i-x,1-182  
CODEN: SBSWBO; ISSN: 0585-7953  
PUBLISHER: Oldenbourg Industrieverlag GmbH  
DOCUMENT TYPE: Journal  
LANGUAGE: German

ED Entered STN: 28 Jun 2004  
AB The operating principle of the developed nitrification sensor is based on measurements of O consumption by a mixed population of nitrifying microorganisms immobilized in a photochem. cross-linked poly(vinyl alc.) on an O thick-layer electrode. The measuring cycle for nitrification substrates starts with a substrate-free phosphate buffer solution, then follows the medium to be measured, and the final step is executed under substrate saturation conditions. Inhibition measurements start with substrate saturation (without inhibitor), then the inhibitor-containing medium is added, and a substrate-free solution is used last. The sensor was tested with various substrates and inhibitors and media containing them. Parallel arrangement of 10 sensor channels enables 2-3 measurements per 1 h. The sensor is storable in a substrate medium for 3-4 wk and operates stably for 40 h. The employed microorganisms were genetically characterized.

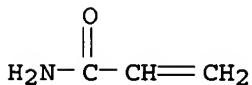
IT 69418-26-4, ZETAG 57  
(development and testing of multichannel biosensor systems for determination of nitrification inhibitors and substrates in sewage)  
RN 69418-26-4 HCPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride

(1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 44992-01-0  
CMF C8 H16 N O2 . Cl● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
CMF C3 H5 N O

CC 61-3 (Water)

Section cross-reference(s): 9, 40, 46, 60, 63

IT Detergents

(dishwashing, liquid; development and testing of multichannel biosensor systems for determination of nitrification inhibitors and substrates in sewage)

IT 62-56-6, Thiourea, analysis 64-17-5, Ethanol, analysis 80-35-3, Sulfamethoxypyridazine 108-95-2, Phenol, analysis 109-57-9, N-Allylthiourea 289-80-5, Pyridazine 1929-82-4, Nitrapyrin 3811-04-9, Potassium chlorate 7440-50-8, Copper, analysis 7647-14-5, Sodium chloride, analysis 69234-01-1, Palegal SF 69418-26-4, ZETAG 57 164458-66-6, Prestogen D 752255-05-3, Peristal PSN 752255-06-4, Kieralon MTF

(development and testing of multichannel biosensor systems for determination of nitrification inhibitors and substrates in sewage)

REFERENCE COUNT: 173 THERE ARE 173 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 14 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:493828 HCPLUS

DOCUMENT NUMBER: 141:39965

TITLE: polymer-containing aqueous cleaning compositions

INVENTOR(S): Martin, Emmanuel; Graham, Keith; Normington, David; Skinner, Malcolm

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

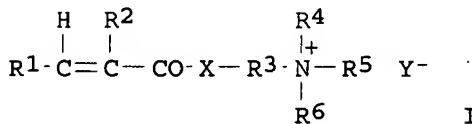
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

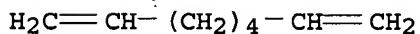
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050815	A1	20040617	WO 2003-EP50848	20031119
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003296764	A1	20040623	AU 2003-296764	20031119
EP 1565545	A1	20050824	EP 2003-812180	20031119
EP 1565545	B1	20060726		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003016562	A	20051004	BR 2003-16562	20031119
CN 1720319	A	20060111	CN 2003-80104625	20031119
JP 2006508224	T	20060309	JP 2004-556318	20031119
AT 334182	T	20060815	AT 2003-812180	20031119
ES 2268490	T3	20070316	ES 2003-3812180	20031119
US 2006074003	A1	20060406	US 2005-535799	20050520
MX 2005PA05680	A	20050726	MX 2005-PA5680	20050527
IN 2005CN01423	A	20070622	IN 2005-CN1423	20050627
PRIORITY APPLN. INFO.:			EP 2002-406042	A 20021129
			WO 2003-EP50848	W 20031119

ED Entered STN: 18 Jun 2004  
GI

AB Aqueous compns. comprise at least one polymer with a particle size of more than 10  $\mu\text{m}$ , formed from the polymerization of (a) at least one monomer of formula I, wherein R1, signifies hydrogen or Me, R2 signifies hydrogen or C1-C4 alkyl, R3 signifies C1-C4 alkylene, R4, R5 and R6 signify independently from each other hydrogen or C1-C4 alkyl, X signifies -O- or -NH- and Y signifies Cl, Br, I, hydrogensulfate or methosulfate; (b) and/or at least one non-ionic monomer; (c) at least one crosslinking agent in an amount of 0 - 50 ppm by the weight of component (a); and (d) optionally at least one chain transfer agent with the proviso that (i) if the polymer is a cationic homopolymer then the amount of the crosslinking agent is always more than 0 ppm and less than 50 ppm.

IT 3710-30-3, 1,7-Octadiene

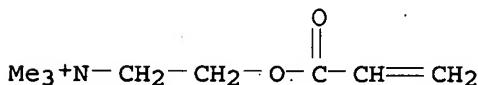
(crosslinking agent; polymer-containing aqueous cleaning compns.)  
 RN 3710-30-3 HCPLUS  
 CN 1,7-Octadiene (CA INDEX NAME)



IT 69418-26-4P  
 (polymer-containing aqueous cleaning compns.)  
 RN 69418-26-4 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

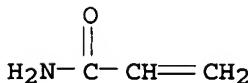
CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl



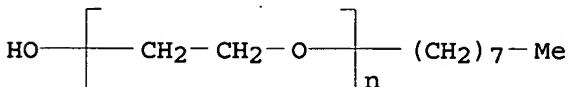
● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
 CMF C3 H5 N O



IT 27252-75-1, Dehydol 04  
 (polymer-containing aqueous cleaning compns.)  
 RN 27252-75-1 HCPLUS  
 CN Poly(oxy-1,2-ethanediyl), α-octyl-ω-hydroxy- (CA INDEX NAME)



IC ICM C11D003-37  
 ICS C08L057-00; C08F220-34; C08J003-03  
 CC 46-6 (Surface Active Agents and Detergents)  
 ST trimethylaminoethyl acrylate acrylamide copolymer contg liq detergent; quaternary ammonium polymer thickener cleaning compn

- IT **Detergents**  
 (liquid; polymer-containing aqueous cleaning compns.)
- IT 96-05-9, Allyl methacrylate 106-99-0, Butadiene, uses 110-26-9  
 999-55-3, Allyl acrylate 1471-17-6, Pentaerythritol triallylether  
 2186-33-6 2555-13-7 3710-30-3, 1,7-Octadiene 4387-85-3,  
 Bisacrylamidoacetic acid 13107-10-3, Tetraallyl ammonium chloride  
 (crosslinking agent; polymer-containing aqueous cleaning compns.)
- IT 54240-53-8P, Acrylamide-dimethylaminoethyl acrylate copolymer  
 69418-26-4P 132824-45-4P, Acrylamide-dimethylaminoethyl  
 acrylate-methylenebisacrylamide copolymer  
 (polymer-containing aqueous cleaning compns.)
- IT 64-19-7, Acetic acid, uses 77-92-9, Citric acid, uses  
 27252-75-1, Dehydol 04 196004-32-7, Glucopon 215CSUP  
 (polymer-containing aqueous cleaning compns.)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L61 ANSWER 15 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:493825 HCPLUS  
 DOCUMENT NUMBER: 141:39960  
 TITLE: Fabric softener compositions comprising polymers  
 INVENTOR(S): Martin, Emmanuel; Graham, Keith; Normington,  
 David; Skinner, Malcolm  
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.  
 SOURCE: PCT Int. Appl., 36 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050812	A1	20040617	WO 2003-EP50847	20031119
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003296763	A1	20040623	AU 2003-296763	20031119
EP 1565544	A1	20050824	EP 2003-812179	20031119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003016683	A	20051018	BR 2003-16683	20031119
CN 1717471	A	20060104	CN 2003-80104530	20031119
JP 2006508274	T	20060309	JP 2004-556317	20031119
US 2006094639	A1	20060504	US 2005-536607	20050525
MX 2005PA05684	A	20050726	MX 2005-PA5684	20050527
IN 2005CN01424	A	20070622	IN 2005-CN1424	20050627
PRIORITY APPLN. INFO.:			EP 2002-406043	A 20021129
			WO 2003-EP50847	W 20031119

ED Entered STN: 18 Jun 2004

AB A fabric softener compns. comprise a fabric softener component or a mixture of fabric softener components and at least one polymer formed from the polymerization of (a) a water soluble ethylenically unsatd. monomer or blend of monomers comprising at least one cationic monomer and/or at least one non-ionic monomer, (b) a crosslinking agent or a mixture of crosslinking agents in an amount of less than 5 ppm by the weight of component (a), and (c) optionally at least one chain transfer agent, with the proviso that (i) if the polymer is a cationic homopolymer then the amount of the crosslinking agent is always more than 0 ppm, as thickeners, as well as to new fabric softener compns.

IT 3710-30-3, 1,7-Octadiene

(crosslinking agent; polymer-containing fabric softener compns.)

RN 3710-30-3 HCPLUS

CN 1,7-Octadiene (CA INDEX NAME)



IT 69418-26-4P

(polymer-containing fabric softener compns.)

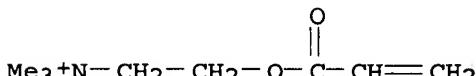
RN 69418-26-4 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy] -, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 44992-01-0

CMF C8 H16 N O2 . Cl

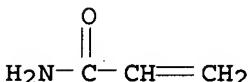


● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM C11D003-00

ICS C11D003-37

CC 46-5 (Surface Active Agents and Detergents)

IT 96-05-9, Allyl methacrylate 106-99-0, Butadiene; uses 110-26-9, N,N'-Methylenebisacrylamide 999-55-3, Allyl acrylate 1471-17-6,

Pentaerythritol triallylether 2186-33-6 2555-13-7,  
 N-Allylacrylamide 3710-30-3, 1,7-Octadiene 4387-85-3,  
 Bisacrylamidoacetic acid 13107-10-3, Tetraallyl ammonium chloride  
 (crosslinking agent; polymer-containing fabric softener compns.)

IT 69418-26-4P

(polymer-containing fabric softener compns.)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L61 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:247015 HCAPLUS

DOCUMENT NUMBER: 140:271419

TITLE: A method of graft polymerization using supported  
 macroinitiators and materials produced by the  
 method

INVENTOR(S): Kano, Takeyoshi; Kawamura, Koichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 131 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1400544	A1	20040324	EP 2003-20552	20030917
EP 1400544	B1	20051228		
R: AT; BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004126046	A	20040422	JP 2002-287814	20020930
JP 2004126047	A	20040422	JP 2002-287815	20020930
JP 2004123837	A	20040422	JP 2002-287821	20020930
JP 2004300251	A	20041028	JP 2003-93867	20030331
JP 2004300282	A	20041028	JP 2003-94690	20030331
JP 2004175098	A	20040624	JP 2003-122061	20030425
JP 2004161995	A	20040610	JP 2003-154551	20030530
US 2004067434	A1	20040408	US 2003-662458	20030916
US 7056642	B2	20060606		
AT 314405	T	20060115	AT 2003-20552	20030917
PRIORITY APPLN. INFO.:			JP 2002-271578	A 20020918
			JP 2002-287814	A 20020930
			JP 2002-287815	A 20020930
			JP 2002-287816	A 20020930
			JP 2002-287821	A 20020930
			JP 2003-93867	A 20030331
			JP 2003-94690	A 20030331
			JP 2003-122061	A 20030425
			JP 2003-154551	A 20030530

ED Entered STN: 25 Mar 2004

AB A method of graft polymerization comprises the steps of (a) forming a polymerization

initiating layer in which a polymer having on a side chain a crosslinking group and a functional group having polymerization initiating capability is immobilized on a support by a crosslinking reaction, (b) contacting a compound having a polymerizable functional group with the polymerization initiating layer, and (c) bonding the compound to the polymerization

initiating layer by supplying energy. The functional group having polymerization initiating capability is selected from aromatic ketones, onium salts, organic peroxides, thio compds., hexaarylbimidazoles, ketoxime esters, borates, azinium salts, pyridinium salts, and carbon-halogen bond-containing compds. The method provides a graft polymerization process to form a graft structure in which all polymer chains are chemically bonded directly to a polymerization initiating layer to prevent dissoln. of an initiator contained in the polymerization initiating layer into a monomer solution. The method can be used to graft a variety of functional monomers onto supports forming hydrophilic surfaces with superior durability. The materials having hydrophilic surfaces can be used as pos. or neg. printing plate precursors having excellent press life and capable of forming a large number of spotless images of high quality even under severe printing conditions. The method addnl. provides graft copolymers having polar groups for use as dispersing materials for metal particles and particle-adsorbing materials where functional particles are firmly adsorbed on the surface as a single layer, the adsorbed functional particle effect being preserved. Thus,

[(2-acryloyloxy)ethyl] (4-benzoylbenzyl)dimethylammonium bromide (8.1), 2-hydroxyethyl methacrylate (9.9) and iso-Pr methacrylate (13.5) were polymerized in propylene glycol monomethyl ether (30) in the presence of dimethyl-2,2'-azobis(2-methylpropionate) (0.43 g). A poly(ethylene terephthalate) film (M 4100) was coated with a solution containing the above polymer (0.4), 2,4-toluene diisocyanate (0.16) and propylene glycol monomethyl ether (1.6) g, and the top layer was crosslinked at 110° for 10 min. The PET support with the crosslinked polymerization initiating top layer was immersed into a 2-ethylethoxy acrylate solution (10%) and UV irradiated for 30 min to produce a graft copolymer.

IT 672959-34-1P 672959-36-3P

(method of graft polymerization using supported macroinitiators and materials produced by method)

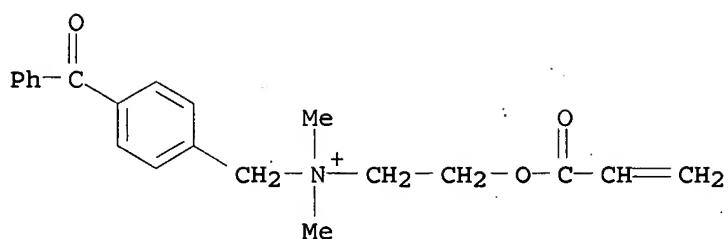
RN 672959-34-1 HCPLUS

CN Benzenemethanaminium, 4-benzoyl-N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, bromide, polymer with 2,4-diisocyanato-1-methylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, 1-methylethyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 125850-75-1

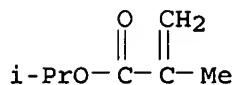
CMF C21 H24 N O3 . Br



● Br<sup>-</sup>

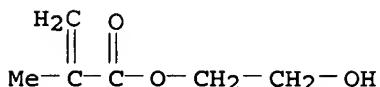
CM 2

CRN 4655-34-9  
CMF C7 H12 O2



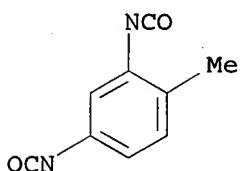
CM 3

CRN 868-77-9  
CMF C6 H10 O3



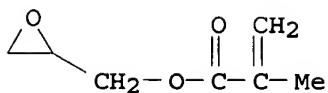
CM 4

CRN 584-84-9  
CMF C9 H6 N2 O2

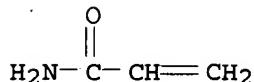


CM 5

CRN 106-91-2  
CMF C7 H10 O3

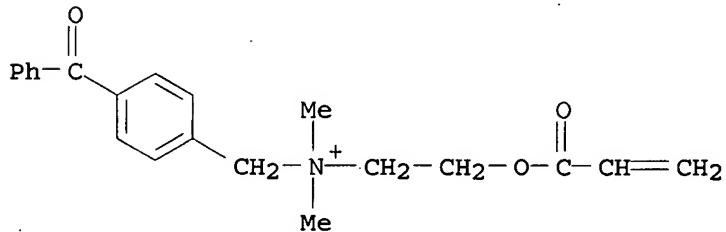


CM 6

CRN 79-06-1  
CMF C3 H5 N O

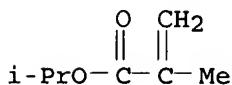
RN 672959-36-3 HCPLUS  
 CN Benzenemethanaminium, 4-benzoyl-N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, bromide, polymer with 2,4-diisocyanato-1-methylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, 1-methylethyl 2-methyl-2-propenoate and 2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 125850-75-1  
CMF C21 H24 N O3 . Br

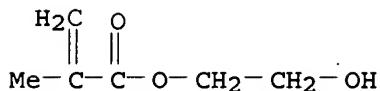
● Br-

CM 2

CRN 4655-34-9  
CMF C7 H12 O2

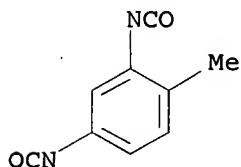
CM 3

CRN 868-77-9  
CMF C6 H10 O3



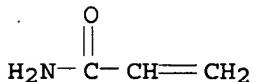
CM 4

CRN 584-84-9  
CMF C9 H6 N2 O2



CM 5

CRN 79-06-1  
CMF C3 H5 N O



- IC ICM C08F265-04  
 CC 35-8 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 37, 74  
 IT Adsorbents  
 Crosslinking  
 Crosslinking agents  
 Dispersing agents  
 Printing plates  
 Templates  
 (method of graft polymerization using supported macroinitiators and materials produced by method)  
 IT 6066-82-6DP, N-Hydroxysuccinimide, reaction products with acrylic acid-containing graft copolymers and nitrobenzylphenol and carbodiimides 25952-53-8DP, N-Ethyl-N'-(3-dimethylaminopropyl)carbodiimide hydrochloride, reaction products with acrylic acid-containing graft copolymers and nitrobenzylphenol and hydroxysuccinimide 37021-63-9DP, reaction products with acrylic acid-containing graft copolymers and hydroxysuccinimide and carbodiimides 672959-26-1P 672959-27-2DP, reaction products with hydroxysuccinimide and nitrobenzylphenol and carbodiimides 672959-27-2P 672959-30-7P 672959-33-0P 672959-34-1P 672959-35-2P 672959-36-3P 672959-37-4P 672959-38-5P 672959-39-6P 672959-40-9P

(method of graft polymerization using supported macroinitiators and materials produced by method)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:157569 HCAPLUS

DOCUMENT NUMBER: 140:201478

TITLE: Manufacture of coagulants and their uses such as retention/draining aids for papermaking or dewatering aids for sludge

INVENTOR(S): Ikeda, Shinsuke

PATENT ASSIGNEE(S): Hymo Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004057837	A	20040226	JP 2002-215362	20020724
PRIORITY APPLN. INFO.:			JP 2002-215362	20020724

ED Entered STN: 26 Feb 2004

AB Coagulants comprise (A) a crosslinkable water-soluble ionic copolymer prepared from a mixture of monomers containing a crosslinkable monomer, and (B) a water-soluble ionic copolymer prepared from a mixture of monomers not containing a crosslinkable monomer. Thus, sep. preparing a copolymer (A) of sodium acrylate, acryloyloxyethyltrimethylammonium chloride, methacryloyloxyethyltrimethylammonium chloride, acrylamide and N,N-methylenebisacrylamide and a copolymer (B) of sodium acrylate, acryloyloxyethyltrimethylammonium chloride and acrylamide, and combining A with B at a ratio 6:4 gave a coagulant.

IT 660861-29-0P, Acrylamide-acryloyloxyethyltrimethylammonium chloride-methacryloyloxyethyltrimethylammonium chloride-N,N'-methylenebisacrylamide-sodium acrylate copolymer  
(coagulants; manufacture of coagulants and their uses such as draining aids for papermaking or dewatering aids for sludge)

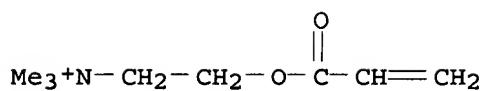
RN 660861-29-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N'-methylenebis[2-propenamide], 2-propenamide, sodium 2-propenoate and N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

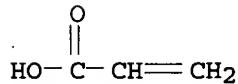
CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

CM 2

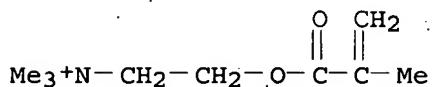
CRN 7446-81-3  
CMF C3 H4 O2 . Na



● Na

CM 3

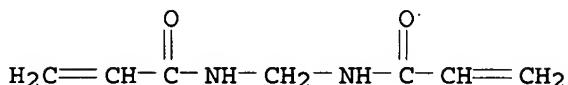
CRN 5039-78-1  
CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

CM 4

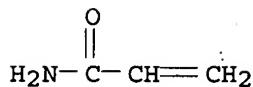
CRN 110-26-9  
CMF C7 H10 N2 O2



CM 5

CRN 79-06-1

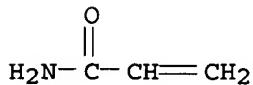
CMF C3 H5 N O



IT 79-06-1DP, Acrylamide, copolymer with vinyl monomers and polycations 109578-73-6P, Acrylamide-acrylic acid-acryloyloxyethyltrimethylammonium chloride copolymer (manufacture of coagulants and their uses such as draining aids for papermaking or dewatering aids for sludge)

RN 79-06-1 HCPLUS

CN 2-Propenamide (CA INDEX NAME)



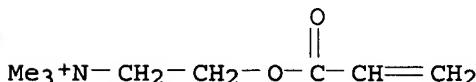
RN 109578-73-6 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 44992-01-0

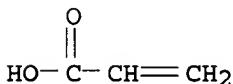
CMF C8 H16 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 79-10-7

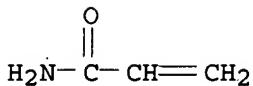
CMF C3 H4 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



IC ICM B01D021-01  
 ICS C02F011-14; C08F220-34; D21H017-37; D21H017-45; D21H021-10  
 CC 46-4 (Surface Active Agents and Detergents)  
 Section cross-reference(s): 43, 61  
 IT 79-10-7DP, Acrylic acid, copolymer with vinyl monomers and polycations  
 660861-29-0P, Acrylamide-acryloyloxyethyltrimethylammonium  
 chloride-methacryloyloxyethyltrimethylammonium chloride-N,N'-  
 methylenebisacrylamide-sodium acrylate copolymer  
 (coagulants; manufacture of coagulants and their uses such as draining  
 aids for papermaking or dewatering aids for sludge)  
 IT 79-06-1DP, Acrylamide, copolymer with vinyl monomers and  
 polycations 5039-78-1DP, Methacryloyloxyethyltrimethylammonium  
 chloride, copolymer with vinyl monomers and polycations  
 44992-01-0DP, Acryloyloxyethyltrimethylammonium chloride, copolymer  
 with vinyl monomers and polycations 109578-73-6P,  
 Acrylamide-acrylic acid-acryloyloxyethyltrimethylammonium chloride  
 copolymer  
 (manufacture of coagulants and their uses such as draining aids for  
 papermaking or dewatering aids for sludge)

L61 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:302786 HCAPLUS  
 DOCUMENT NUMBER: 138:304712  
 TITLE: Tris(hydroxymethyl)acrylamidomethane polymer,  
 inverse latex and microlatex containing it, and  
 their use  
 INVENTOR(S): Mallo, Paul; Tabacchi, Guy; Braun, Olivier; Pucci,  
 Bernard  
 PATENT ASSIGNEE(S): Societe d'Exploitation de Produits pour les  
 Industries Chimiques SEPPIC, Fr.  
 SOURCE: Fr. Demande, 23 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

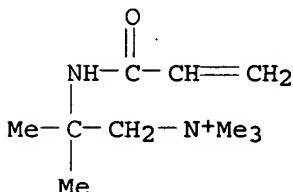
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2830867	A1	20030418	FR 2001-13361	20011017
FR 2830867	B1	20061222		
WO 2003033553	A1	20030424	WO 2002-FR3394	20021004
W: US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
EP 1448627	A1	20040825	EP 2002-793157	20021004
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK				
US 2005014893	A1	20050120	US 2004-493154	20040907
PRIORITY APPLN. INFO.:			FR 2001-13361	A 20011017
			WO 2002-FR3394	W 20021004

ED Entered STN: 20 Apr 2003  
 AB Linear or crosslinked polymers are obtained by homopolymer.  
 of N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]propenamide (I) or by  
 copolymer. of I with one or more monomers chosen from cationic  
 monomers, monomers containing ≥1 strong partially or completely  
 salified acid function, monomers containing ≥1 a weak partially or  
 completely salified acid function, or neutral monomers in inverse  
 latexes or microlatexes. These polymers are useful as thickeners,  
 flocculants, superabsorbents, and rheol. modifiers.  
 IT 509085-11-4P, Acrylamide-2,N,N,N-tetramethyl-2-  
 acrylamidopropanammonium chloride-tris(hydroxymethyl)acrylamidomethane  
 copolymer 509085-13-6P, Acrylamide-N,N,N-trimethyl-2-  
 acrylamidopropanammonium chloride-tris(hydroxymethyl)acrylamidomethane  
 copolymer  
 (tris(hydroxymethyl)acrylamidomethane polymers prepared in inverse  
 latexes or microlatexes)  
 RN 509085-11-4 HCPLUS  
 CN 1-Propanaminium, N,N,N,2-tetramethyl-2-[(1-oxo-2-propenyl)amino]-,  
 chloride, polymer with N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2-  
 propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 51730-62-2

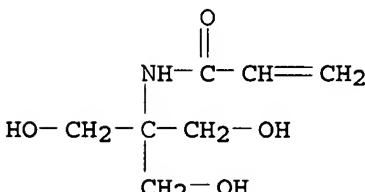
CMF C10 H21 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 13880-05-2

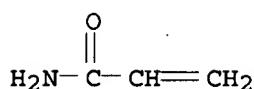
CMF C7 H13 N O4



CM 3

CRN 79-06-1

CMF C3 H5 N O



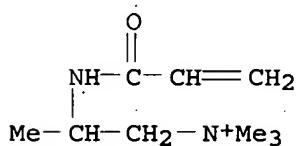
RN 509085-13-6 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 509085-06-7

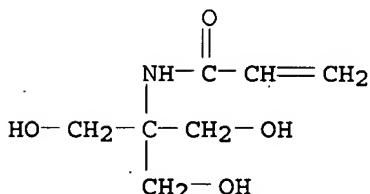
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 13880-05-2

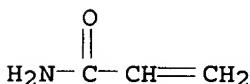
CMF C7 H13 N O4



CM 3

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F020-54

ICS C08J003-05; C10M119-24  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 IT Inks  
     (printing; tris(hydroxymethyl)acrylamidomethane polymers prepared in inverse latexes or microlatexes for thickeners for cosmetics, pharmaceuticals, textile printing inks, and detergents)  
 IT Cosmetics  
     Detergents  
 Drugs  
 Textile printing  
 Thickening agents  
     (tris(hydroxymethyl)acrylamidomethane polymers prepared in inverse latexes or microlatexes for thickeners for cosmetics, pharmaceuticals, textile printing inks, and detergents)  
 IT 30347-69-4P, Tris(hydroxymethyl)acrylamidomethane homopolymer  
 509085-03-4P, Methylenebisacrylamide-sodium 2-acrylamido-2-methylpropanesulfonate-tris(hydroxymethyl)acrylamidomethane copolymer  
 509085-04-5P, Sodium 2-acrylamido-2-methylpropanesulfonate-tris(hydroxymethyl)acrylamidomethane copolymer 509085-05-6P,  
 2,N,N,N-Tetramethyl-2-acrylamidopropanammonium chloride-tris(hydroxymethyl)acrylamidomethane copolymer 509085-07-8P  
 509085-08-9P, Diallyldimethylammonium chloride-tris(hydroxymethyl)acrylamidomethane copolymer 509085-09-0P,  
 2-(Dimethylamino)ethyl acrylate-tris(hydroxymethyl)acrylamidomethane copolymer 509085-10-3P, 2-(Dimethylamino)ethyl methacrylate-tris(hydroxymethyl)acrylamidomethane copolymer 509085-11-4P,  
 Acrylamide-2,N,N,N-tetramethyl-2-acrylamidopropanammonium chloride-tris(hydroxymethyl)acrylamidomethane copolymer 509085-12-5P  
 509085-13-6P, Acrylamide-N,N,N-trimethyl-2-acrylamidopropanammonium chloride-tris(hydroxymethyl)acrylamidomethane copolymer 509085-14-7P, Diacetoneacrylamide-diallyldimethylammonium chloride-tris(hydroxymethyl)acrylamidomethane copolymer  
 509085-15-8P, Acrylamide-2-(dimethylamino)ethyl acrylate-tris(hydroxymethyl)acrylamidomethane copolymer 509085-16-9P,  
 Diacetoneacrylamide-2-(dimethylamino)ethyl methacrylate-tris(hydroxymethyl)acrylamidomethane copolymer  
     (tris(hydroxymethyl)acrylamidomethane polymers prepared in inverse latexes or microlatexes)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:154483 HCAPLUS  
 DOCUMENT NUMBER: 138:188285  
 TITLE: Modified polyalkyleneimine and methods of using the same  
 INVENTOR(S): Ishizaki, Takako; Nakashin, Kazuhiro; Wakamatsu, Hideyuki; Sakai, Kenji; Odaka, Emiko  
 PATENT ASSIGNEE(S): Hymo Corporation, Japan  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016379	A1	20030227	WO 2002-JP7915	20020802

W: CN, US

RW: DE, FR, GB

JP 2003055454	A	20030226	JP 2001-243874	20010810
JP 2003053400	A	20030225	JP 2001-245393	20010813
JP 2003073996	A	20030312	JP 2001-262542	20010831
JP 2003193396	A	20030709	JP 2001-388924	20011221
JP 3871308	B2	20070124		
JP 2003286679	A	20031010	JP 2002-86044	20020326
JP 3871317	B2	20070124		
EP 1418194	A1	20040512	EP 2002-753224	20020802
R: DE, FR, GB				
US 2004238138	A1	20041202	US 2004-486379	20040210
PRIORITY APPLN. INFO.:			JP 2001-243874	A 20010810
			JP 2001-245393	A 20010813
			JP 2001-262542	A 20010831
			JP 2001-388924	A 20011221
			JP 2002-86044	A 20020326
			WO 2002-JP7915	W 20020802

ED Entered STN: 28 Feb 2003

AB The present invention relates to a modified polyalkyleneimine with satisfactory stability obtained by modifying a polyalkyleneimine through a reaction which is easy to control and does not lower the cation d. characteristic of the polyalkyleneimine; and various methods of treatment with the modified polyalkyleneimine. A polyalkyleneimine or a mixture thereof with a polyamine is reacted with a polycationic substance having a specific structure to produce a modified polyalkyleneimine having a specific structure. The modified polyalkyleneimine can be used as a sludge dehydrator, agent for improving suitability for dehydrating filtration, agent for pretreatment of papermaking materials, or yield improver to thereby enable an efficient treatment. Thus, 146.6 g epichlorohydrin and 123.8 g 50% dimethylamine aqueous solution were reacted to give an ionene polymer, 9.6 g of which was reacted with 266.7 g 50% polyethylenimine P 1050 to give a modified polyethylenimine.

IT 69418-26-4P, Acrylamide-acryloyloxyethyltrimethyl ammonium chloride copolymer 480432-44-8P  
(preparation of water-soluble polymers used with modified polyalkyleneimines in papermaking)

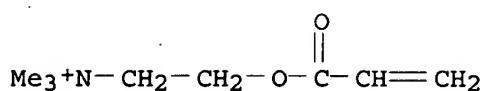
RN 69418-26-4 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 44992-01-0

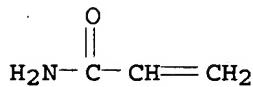
CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

CM 2

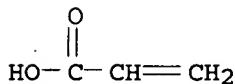
CRN 79-06-1  
CMF C3 H5 N O



RN 480432-44-8 HCPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide, 2-propenoic acid and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

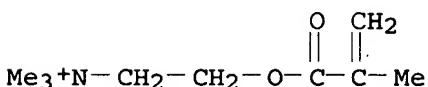
CRN 7446-81-3  
CMF C3 H4 O2 . Na



● Na

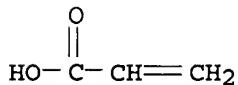
CM 2

CRN 5039-78-1  
CMF C9 H18 N O2 . Cl

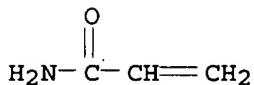


● Cl<sup>-</sup>

CM 3

CRN 79-10-7  
CMF C3 H4 O2

CM 4

CRN 79-06-1  
CMF C3 H5 N O

IC ICM C08G073-04  
 ICS B01D021-01; C02F001-56; C02F011-14; D21H021-02; D21H017-56  
 CC 35-8 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 43, 60  
 IT Crosslinking agents  
 (polyalkyleneimine modifier; preparation of modified polyalkyleneimines  
 for sludge treatment or papermaking)  
 IT 69418-26-4P, Acrylamide-acryloyloxyethyltrimethyl ammonium  
 chloride copolymer 109206-19-1P 480432-44-8P  
 (preparation of water-soluble polymers used with modified  
 polyalkyleneimines in papermaking)

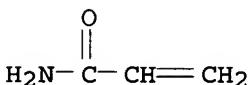
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L61 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:813881 HCAPLUS  
 DOCUMENT NUMBER: 137:329267  
 TITLE: Cosmetic compositions containing water-soluble  
 polymer complexes  
 INVENTOR(S): Chen, Shih-Ruey Thomas; Devito, Valentino L.;  
 Frederick, Kevin W.  
 PATENT ASSIGNEE(S): Clearwater, Inc., USA; WSP Chemical & Technology  
 LLC  
 SOURCE: PCT Int. Appl., 71 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

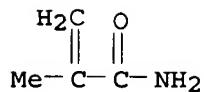
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083073	A2	20021024	WO 2002-US11713	20020415
WO 2002083073	A3	20030515		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,				
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,				
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,				
NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,				
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,				
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,				
SN, TD, TG				
AU 2002252663	A1	20021028	AU 2002-252663	20020415
US 2002188040	A1	20021212	US 2002-122764	20020415
US 7001953	B2	20060221		
US 2003008779	A1	20030109	US 2002-122869	20020415
US 7087556	B2	20060808		
US 2003064044	A1	20030403	US 2002-122750	20020415
US 6939536	B2	20050906		
US 2003083204	A1	20030501	US 2002-122671	20020415
US 6767867	B2	20040727		
US 2005183837	A1	20050825	US 2005-87097	20050322
US 2006002879	A1	20060105	US 2005-200514	20050809
PRIORITY APPLN. INFO.:			US 2001-284043P	P 20010416
			US 2002-122750	A3 20020415
			US 2002-122764	A3 20020415
			WO 2002-US11713	W /20020415

ED Entered STN: 25 Oct 2002  
 AB A composition for treating a keratin-based substrate that includes a cosmetically acceptable medium containing a water-soluble interjacent complex. The water-soluble interjacent complex includes a first water-soluble polymer and a second water-soluble polymer formed by polymerizing one or more water-soluble monomers in the presence of the first water-soluble polymer. The water-soluble interjacent complex is characterized in that it forms a solution in water that is free of insol. polymer particles. The water-soluble interjacent complex is used in a method of treating a keratin based substrate, whereby a cosmetically acceptable medium is applied to the substrate and contains from 0.1-20 % by weight of the water-soluble interjacent complex. Thus, a composition contained Polyquaternium-7 (WSPQ 7) 237.7 diallyldimethylammonium chloride (DADMAC) 1076.9, sodium EDTA 0.75, sodium persulfate 4.1, and water 435.1 g. After polymn, the solution obtained contained 39.7% poly(DADMAC) and 2.7% Polyquaternium-7. A 5 weight% aqueous solution of the complex between the 2 polymers was obtained. A shampoo contained the above polymer.  
 IT 79-06-1D, Acrylamide, polymers 79-39-0D,  
 MethAcrylamide, polymers  
 (cosmetic compns. containing water-soluble polymer complexes)  
 RN 79-06-1 HCPLUS  
 CN 2-Propenamide (CA INDEX NAME)



RN 79-39-0 HCPLUS  
 CN 2-Propenamide, 2-methyl- (CA INDEX NAME)



IT 69418-26-4P 243140-33-2P

(polymer blends; cosmetic compns. containing water-soluble polymer complexes)

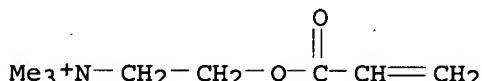
RN 69418-26-4 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 44992-01-0

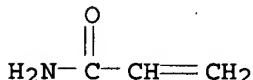
CMF C8 H16 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



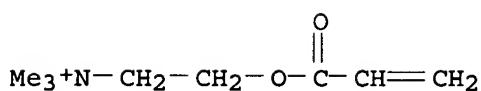
RN 243140-33-2 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

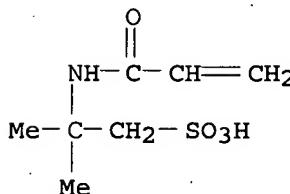
CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

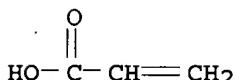
CM 2

CRN 15214-89-8  
CMF C7 H13 N O4 S



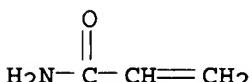
CM 3

CRN 79-10-7  
CMF C3 H4 O2



CM 4

CRN 79-06-1  
CMF C3 H5 N O



IC ICM A61K  
 CC 62-4 (Essential Oils and Cosmetics)  
 IT Detergents  
     (dishwashing, liquid; cosmetic compns. containing water-soluble polymer complexes)  
 IT 79-06-1D, Acrylamide, polymers 79-39-0D,  
     MethAcrylamide, polymers 79-41-4D, Methacrylic acid, polymers  
     88-12-0D, polymers 107-35-7D, Taurine, N-alkyl derivs. 107-43-7D,  
     Betaine, derivs. 107-97-1D, Sarcosine, cocoyl derivs. 137-16-6,

Sodium lauroyl sarcosinate 139-96-8, Triethanolamine lauryl sulfate 143-00-0, Diethanolamine lauryl sulfate 151-21-3, Sodium lauryl sulfate, biological studies 577-11-7, Sodium dioctylsulfosuccinate 683-10-3 693-33-4 871-37-4, Oleylbetaine 922-80-5, Sodium diamylsulfosuccinate 2235-54-3, Ammonium lauryl sulfate 3006-15-3, Sodium dihexylsulfosuccinate 3401-73-8 3546-96-1, Sodium 3-dodecylaminopropionate 4292-10-8, Laurylamidopropylbetaine 4706-78-9, Potassium lauryl sulfate 4722-98-9, Monoethanolamine lauryl sulfate 7631-98-3, Sodium lauryl sarcosinate 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9002-89-5, Poly(vinyl alcohol) 9002-98-6 9003-05-8, Polyacrylamide 9003-39-8; Polyvinylpyrrolidone 9004-34-6D, Cellulose, derivs. 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-82-4, Sodium laureth sulfate 9005-25-8D, Starch, derivs. 9005-38-3, Sodium alginate 10471-50-8 11078-30-1, Galactomannan 13177-41-8 14481-60-8, Disodium N-octadecyl sulfosuccinamate 15930-65-1 17404-70-5, Sodium lauroyl sulfate 17961-18-1, Triethylamine lauryl sulfate 24020-67-5 25014-12-4, Polymethacrylamide 25087-26-7, Poly(methacrylic acid) 25155-30-0, Sodium dodecylbenzenesulfonate 26248-24-8, Sodium tridecylbenzenesulfonate 26336-38-9, Poly(vinyl amine) 32612-48-9, Ammonium laureth sulfate 39421-75-5D, Hydroxypropyl guar gum, derivs. 50602-06-7, Potassium laureth sulfate 52562-22-8 52665-42-6 58855-36-0, Diethanolamine laureth sulfate 68184-04-3, Monoethanolamine laureth sulfate 111774-28-8, Diallyldimethylammonium chloride-Hydroxyethyl cellulose graft copolymer 116644-76-9 116874-26-1, Lauric monoglyceride sodium sulfate 180968-45-0 180968-46-1 264230-87-7 264230-89-9, Ammonium Lauroyl sulfate 264230-93-5, Triethylamine laureth sulfate (cosmetic compns. containing water-soluble polymer complexes) IT 9000-30-0P, Guar gum 11138-66-2P, Xanthan gum 25136-75-8P, Polyquaternium 39 26062-79-3P 26590-05-6P 53633-54-8P 55008-57-6P 69418-26-4P 81859-24-7P, Polyquaternium 10 131954-48-8P, Polyquaternium 28 243140-33-2P (polymer blends; cosmetic compns. containing water-soluble polymer complexes)

L61 ANSWER 21 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:638301 HCPLUS  
 DOCUMENT NUMBER: 137:170342  
 TITLE: Functional breakable crosslinkers, and polymer networks thereof  
 INVENTOR(S): Moritani, Tohei; Alvarez-Lorenzo, Carmen  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 24 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002115738	A1	20020822	US 2002-68550	20020206
PRIORITY APPLN. INFO.:			US 2001-267900P	P 20010209
			US 2001-299981P	P 20010621

ED Entered STN: 23 Aug 2002

AB This invention relates to functional breakable crosslinkers and

polymer networks made of functional breakable crosslinkers. The polymer networks show high selectivity or mol. recognition and are suitable for the use in separation materials and sensors. A representative functional crosslinker is 2,3-Dihydroxy-N,N,N',N'-tetramethyl-N,N'-bis[3-(acryloylamino)propyl]-1,4-butanediaminium dibromide (Imprinter Q). Imprinter Q comprises three functional parts: two polymerizable double bonds; two cationic groups; and a 1,2-glycol link between the cationic groups that is easily cleavable. Imprinter Q was polymerized with other polymerizable monomers (such as N-isopropylacrylamide) and crosslinkers [such as N,N'-methylenebis(acrylamide)] to obtain polymer networks. After breaking the 1,2-glycol bond, the polymer network has receptor sites that present high affinity for divalent anionic mols. or ions.

IT 448236-31-5P

(functional breakable crosslinkers for polymer networks useful in as sensors in mol. recognition)

RN 448236-31-5 HCPLUS

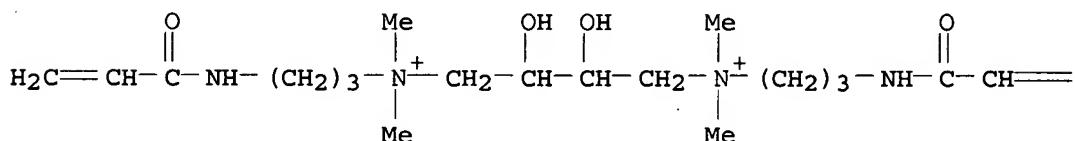
CN 1,4-Butanediaminium, 2,3-dihydroxy-N,N,N',N'-tetramethyl-N,N'-bis[3-[(1-oxo-2-propenyl)amino]propyl]-, dibromide, polymer with N,N'-methylenebis[2-propenamide] and N-(1-methylethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 448236-30-4

CMF C20 H40 N4 O4 . 2 Br

## PAGE 1-A

●2 Br<sup>-</sup>

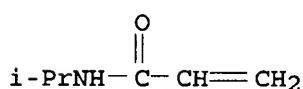
## PAGE 1-B

= CH<sub>2</sub>

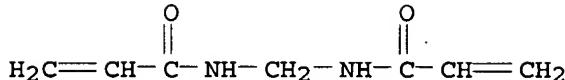
CM 2

CRN 2210-25-5

CMF C6 H11 N O



CM 3

CRN 110-26-9  
CMF C7 H10 N2 O2IC ICM G01N033-543  
ICS C08F002-00

INCL 521142000

CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 80

IT Crosslinking agents

(dihydroxytetramethylbis[(acryloylamino)propyl]butanediaminium dibromide; functional breakable crosslinkers for polymer networks useful in as sensors in mol. recognition)

IT 448236-31-5P

(functional breakable crosslinkers for polymer networks useful in as sensors in mol. recognition)

L61 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:537382 HCAPLUS

DOCUMENT NUMBER: 135:117235

TITLE: Fat-binding polymers for treatment of obesity and hypertriglyceridemia

INVENTOR(S): Mandeville, W. Harry, III; Whitesides, George M.; Holmes-Farley, Stephen Randall

PATENT ASSIGNEE(S): Geltex Pharmaceuticals, Inc., USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 4,963, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6264937	B1	20010724	US 1998-166453	19981005
CA 2318417	A1	19990715	CA 1999-2318417	19990104
WO 9934787	A2	19990715	WO 1999-US28	19990104
WO 9934787	A3	20000120		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9919505	A	19990726	AU 1999-19505	19990104
AU 740233	B2	20011101		
BR 9907234	A	20001010	BR 1999-7234	19990104
EP 1043981	A2	20001018	EP 1999-900369	19990104

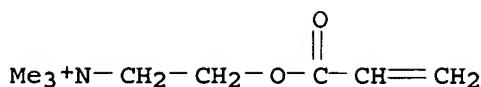
EP 1043981	B1	20030416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1288381	A	20010321	CN 1999-802031	19990104
HU 200100890	A2	20010828	HU 2001-890	19990104
JP 2002500183	T	20020108	JP 2000-527238	19990104
NZ 505294	A	20030228	NZ 1999-505294	19990104
AT 237349	T	20030515	AT 1999-900369	19990104
RU 2222335	C2	20040127	RU 2000-120918	19990104
ES 2200493	T3	20040301	ES 1999-900369	19990104
CN 1698647	A	20051123	CN 2005-10078190	19990104
NZ 523301	A	20051125	NZ 1999-523301	19990104
PL 193452	B1	20070228	PL 1998-3438	19990104
NO 2000003510	A	20000907	NO 2000-3510	20000707
US 7048917	B1	20060523	US 2000-721291	20001122
HK 1034044	A1	20060203	HK 2001-104514	20010629
US 2003175236	A1	20030918	US 2002-307151	20021127
PRIORITY APPLN. INFO.:			US 1998-4963	B2 19980109
			US 1998-166453	A 19981005
			CN 1999-802031	A3 19990104
			WO 1999-US28	W 19990104
			US 1999-353329	A3 19990714
			US 2000-721309	B1 20001122

*W. Shrestha*

ED Entered STN: 25 Jul 2001  
 AB The present invention relates to a method for treating obesity, a method for reducing the absorption of dietary fat, and a method for treating hypertriglyceridemia in a patient and to particular polymers for use in the methods or in a manufacture of a medicament. The methods comprise the step of orally administering to a mammal, such as a human, a therapeutically effective amount of one or more fat-binding polymers. The administration of the fat-binding polymer of the invention facilitates the removal of fat from the body prior to digestion, with minimal side effects and low toxicity. In a preferred embodiment, the one or more fat-binding polymers are administered in combination with one or more lipase inhibitors, for example, lipstatin and tetrahydrolipstatin. For example, fecal fat excretion of 40% of ingested fats was observed after administration to rats of epichlorohydrin-crosslinked poly(allylamine) hydrochloride alkylated with 1-bromododecane using at a dose of 5% of diet.  
 IT 69418-26-4P 107103-42-4P 229625-68-7P  
 229625-71-2P 229625-74-5P 229625-75-6P  
 229625-79-0P 229625-81-4P 350988-21-5P  
 350988-22-6P  
 (preparation of fat-binding polymers for treatment of obesity and hypertriglyceridemia)  
 RN 69418-26-4 HCAPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

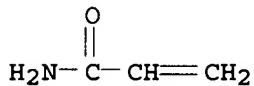
CRN 44992-01-0  
CMF C8 H16 N O2 . Cl



● Cl -

CM 2

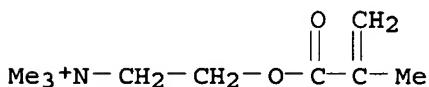
CRN 79-06-1  
CMF C3 H5 N O



RN 107103-42-4 HCPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N'-methylenebis[2-methyl-2-propenamide] and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

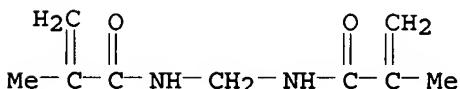
CRN 5039-78-1  
CMF C9 H18 N O2 . Cl



● Cl -

CM 2

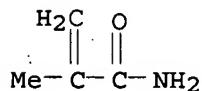
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CMF C9 H14 N2 O2



CM 3

CRN 79-39-0

CMF C4 H7 N O



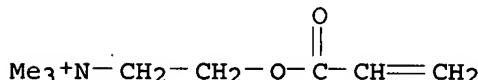
RN 229625-68-7 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with octadecyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

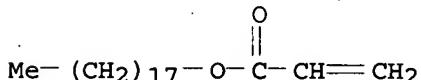
CMF C8 H16 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 4813-57-4

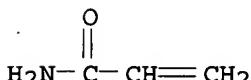
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CM 3

CRN 79-06-1

CMF C3 H5 N O

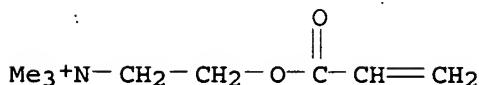


RN 229625-71-2 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with dodecyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

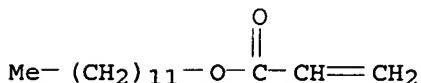
CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl



● Cl -

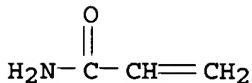
CM 2

CRN 2156-97-0  
 CMF C15 H28 O2



CM 3

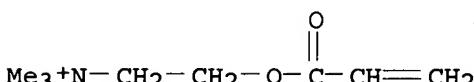
CRN 79-06-1  
 CMF C3 H5 N O



RN 229625-74-5 HCPLUS  
 CN Ethanaminium; N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride,  
 polymer with N,N'-methylenebis[2-propenamide], octadecyl 2-propenoate  
 and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

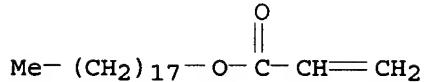
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● Cl -

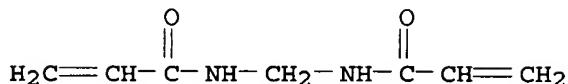
CM 2

CRN 4813-57-4  
 CMF C21 H40 O2



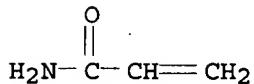
CM 3

CRN 110-26-9  
 CMF C7 H10 N2 O2



CM 4

CRN 79-06-1  
 CMF C3 H5 N O

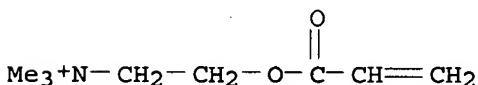


RN 229625-75-6 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride,  
 polymer with dodecyl 2-propenoate, N,N'-methylenabis[2-propenamide]  
 and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl

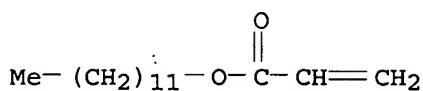


● Cl-

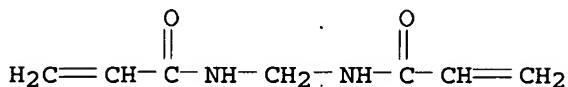
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CRN 2156-97-0

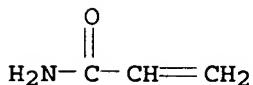
CMF C15 H28 O2



CM 3

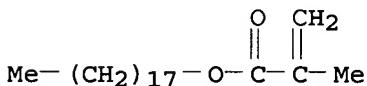
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CMF C7 H10 N2 O2

CM 4

CRN 79-06-1  
CMF C3 H5 N O

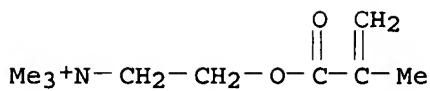
RN 229625-79-0 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N'-methylenebis[2-methyl-2-propenamide], 2-methyl-2-propenamide and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7  
CMF C22 H42 O2

CM 2

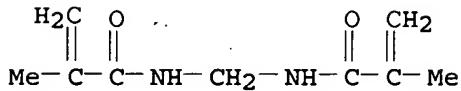
CRN 5039-78-1  
CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

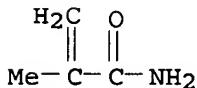
CM 3

CRN 2359-15-1  
CMF C9 H14 N2 O2



CM 4

CRN 79-39-0  
CMF C4 H7 N O

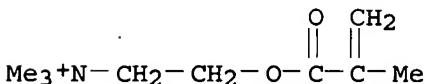


RN 229625-81-4 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with dodecyl 2-methyl-2-propenoate, N,N'-methylenebis[2-methyl-2-propenamide] and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

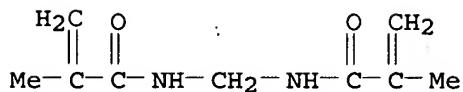
CRN 5039-78-1  
CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

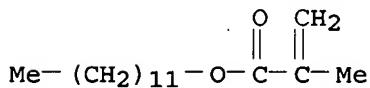
CM 2

CRN 2359-15-1  
 CMF C9 H14 N2 O2



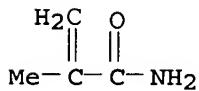
CM 3

CRN 142-90-5  
 CMF C16 H30 O2



CM 4

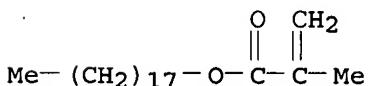
CRN 79-39-0  
 CMF C4 H7 N O



RN 350988-21-5 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-methyl-2-propenamide and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

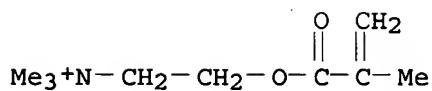
CM 1

CRN 32360-05-7  
 CMF C22 H42 O2



CM 2

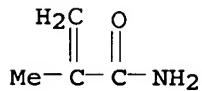
CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

CM 3

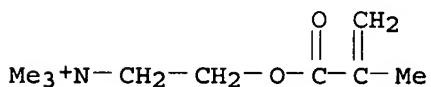
CRN 79-39-0  
CMF C4 H7 N O



RN 350988-22-6 HCPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with dodecyl 2-methyl-2-propenoate and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

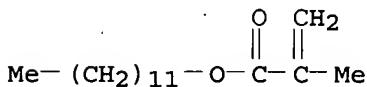
CRN 5039-78-1  
CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

CM 2

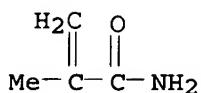
CRN 142-90-5  
CMF C16 H30 O2



CM 3

CRN 79-39-0

CMF C4 H7 N O



IC ICM A61K031-785  
 ICS A61K031-765; A61K031-335; A61K031-74  
 INCL 424078350  
 CC 1-10 (Pharmacology)  
 Section cross-reference(s): 35, 63  
 IT Antiobesity agents  
     Crosslinking agents  
     Hypertriglyceridemia  
     Hypolipemic agents  
         (fat-binding polymers for treatment of obesity and  
         hypertriglyceridemia)  
 IT 25610-84-8P, Epichlorohydrin-ethylenimine copolymer 26063-69-4P,  
 Poly(diallylamine) hydrochloride 34411-58-0P, Diallylamine  
 hydrochloride-epichlorohydrin copolymer 37890-28-1P,  
 Diallylmethylamine-epichlorohydrin copolymer 69418-26-4P  
 107103-42-4P 152751-57-0P, Allylamine hydrochloride-  
 epichlorohydrin copolymer 198342-67-5P, Epichlorohydrin-vinylamine  
 copolymer 223647-98-1P 229625-68-7P 229625-71-2P  
 229625-74-5P 229625-75-6P 229625-79-0P  
 229625-81-4P 350987-85-8P 350987-87-0P 350987-89-2P  
 350987-92-7P 350987-94-9P 350987-97-2P 350987-98-3P  
 350987-99-4P 350988-00-0P 350988-01-1P 350988-02-2P  
 350988-03-3P 350988-04-4P 350988-05-5P 350988-06-6P  
 350988-07-7P 350988-08-8P 350988-09-9P 350988-10-2P  
 350988-11-3P 350988-12-4P 350988-13-5P 350988-14-6P  
 350988-15-7P 350988-16-8P 350988-17-9P 350988-18-0P  
 350988-19-1P 350988-20-4P 350988-21-5P  
 350988-22-6P  
     (preparation of fat-binding polymers for treatment of obesity and  
     hypertriglyceridemia)

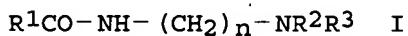
REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
RE FORMAT

L61 ANSWER 23 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2001:12548 HCPLUS  
 DOCUMENT NUMBER: 134:88632  
 TITLE: Fatty acid amidoamines and cationic polymers as  
emulsifiers for bitumen emulsions  
 INVENTOR(S): Bigorra Llosas, Joaquin; Escoda, Maria; Pi  
Subirana, Rafael  
 PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 12 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

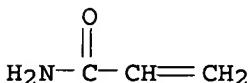
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001000734	A1	20010104	WO 2000-EP5668	20000620

W: AU, US  
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
 NL, PT, SE  
 DE 19929962 A1 20010111 DE 1999-19929962 19990629  
 DE 19929962 C2 20021114  
 EP 1189990 A1 20020327 EP 2000-936898 20000620  
 EP 1189990 B1 20030226  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, FI  
 AT 233298 T 20030315 AT 2000-936898 20000620  
 ES 2193084 T3 20031101 ES 2000-936898 20000620  
 PRIORITY APPLN. INFO.: DE 1999-19929962 A 19990629  
 WO 2000-EP5668 W 20000620

OTHER SOURCE(S): MARPAT 134:88632  
 ED Entered STN: 05 Jan 2001  
 GI



AB Emulsifiers for manufacture of aqueous bitumen emulsions consist of a mixture of cationic polymers and fatty acid amidoamines of the formula  $\text{R}^1\text{CONH}(\text{CH}_2)_n\text{NR}^2\text{R}^3$  (I;  $\text{R}^1\text{CO}$  is a linear or branched, saturated or unsatd. acyl group,  $\text{R}^2$  and  $\text{R}^3$  are, independently, H or C1-3-alkyl, and  $n = 1-10$ ). Preferably, I is derived from coco fatty acids, tallow fatty acids, or hydrogenated tallow fatty acids;  $\text{R}^2$  and  $\text{R}^3 = \text{Me}$ , and  $n = 3$ . Suitable cationic polymers are quaternized cellulose and carbohydrates, quaternized nitrogen-containing vinyl and acrylic polymers, and quaternized polyamides. The fatty acid amidoamines and cationic polymers are present in the emulsifier mixture at a 50-99.9:0.1-50 weight ratio, preferably a 80-95:5-20 weight%. The entire emulsifier mixture is present in the emulsion at a 0.15-1 weight% concentration, based on total emulsion weight  
 IT 79-06-1D, Acrylamide, polymers with quaternized diallyl amine (emulsifiers containing; fatty acid amidoamines and cationic polymers as emulsifiers for bitumen emulsions)  
 RN 79-06-1 HCPLUS  
 CN 2-Propenamide (CA INDEX NAME)

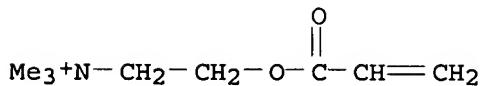


IT 69418-26-4 114122-08-6  
 (emulsifiers containing; fatty acid amidoamines and cationic polymers as emulsifiers for bitumen emulsions)  
 RN 69418-26-4 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

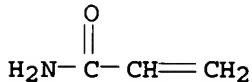
CM 1

CRN 44992-01-0

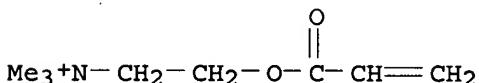
CMF C8 H16 N O2 . Cl

● Cl<sup>-</sup>

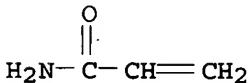
CM 2

CRN 79-06-1  
CMF C3 H5 N ORN 114122-08-6 HCAPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 20284-80-4  
CMF C8 H16 N O2

CM 2

CRN 79-06-1  
CMF C3 H5 N OIC ICM C08L095-00  
ICS C08K005-20CC 51-10 (Fossil Fuels, Derivatives, and Related Products)  
Section cross-reference(s): 46IT 62-49-7D, Choline, derivs., polymers with acrylic acid  
79-06-1D, Acrylamide, polymers with quaternized diallyl amine  
79-10-7D, Acrylic acid, polymers with choline derivs. 124-02-7D,  
Diallylamine, quaternized derivs., polymers with acrylamide

1398-61-4D, Chitin, cationic derivs. 9000-30-0D, Guar gum, cationic  
 9002-98-6 9004-62-0D, Hydroxyethyl cellulose, quaternized  
 9005-25-8D, Starch, cationic derivs., uses 25085-20-5D, Adipic  
 acid-diethylenetriamine copolymer, quaternized 29297-55-0D,  
 Vinylpyrrolidone-vinylimidazole copolymer, quaternized derivs.  
 53694-17-0, Acrylic acid-dimethyldiallylammonium chloride copolymer  
 65829-78-9

(emulsifiers containing; fatty acid amidoamines and cationic polymers  
 as emulsifiers for bitumen emulsions)

IT 109-55-7D, reaction products with tallow fatty acids and  
 hypophosphoric acid 7803-60-3D, Hypophosphoric acid, reaction  
 products with tallow fatty acids and dimethylaminopropylamine  
 26590-05-6, Acrylamide-diallyldimethylammonium chloride copolymer  
 69418-26-4 114122-08-6

(emulsifiers containing; fatty acid amidoamines and cationic polymers  
 as emulsifiers for bitumen emulsions)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR  
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
 RE FORMAT

L61 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:114381 HCAPLUS

DOCUMENT NUMBER: 132:156549

TITLE: Photoprotective skin care compositions comprising  
 sunscreens, structuring agent, and surfactants

INVENTOR(S): Tanner, Paul Robert; Wagner, Julie Ann; Irwin,  
 Christopher

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: U.S., 13 pp., Cont.-in-part of U.S. 5,759,202.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6024942	A	20000215	US 1997-986956	19971208
US 5759524	A	19980602	US 1996-599202	19960209
CN 1213296	A	19990407	CN 1997-192949	19970124

PRIORITY APPLN. INFO.: US 1996-599202 A2 19960209

ED Entered STN: 17 Feb 2000

AB The present invention relates to leave on, skin care compns.,  
 comprising: (a) from about 0.1% to about 30% of a sunscreen active,  
 (b) from about 0.5% to about 20% of a hydrophobic, structuring agent,  
 (c) from about 0.2% to about 10% of a hydrophilic surfactant, (d) from  
 about 0.1% to about 5% of a thickening agent, (e) from about 0.1% to  
 about 25% of a skin lightening agent and (f) water. These compns. are  
 useful for providing (i) protection to human skin from the harmful  
 effects of UV radiation and (ii) a skin lightening benefit.  
 Formulations of 3 compns. containing 6.0% octyl methoxycinnamate are  
 disclosed.

IT 35429-19-7, Polyquaternium 32

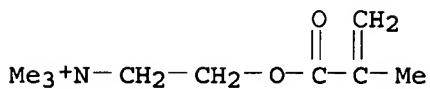
(photoprotective skin care compns. comprising sunscreens,  
 structuring agent, and surfactants)

RN 35429-19-7 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-,  
 chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

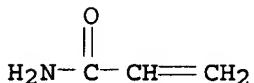
CM 1

CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
 CMF C3 H5 N O



IC ICM A61K007-42

INCL 424059000

CC 62-4 (Essential Oils and Cosmetics)

IT Crosslinking agents

Photoprotectants

Placenta

Sunscreens

Surfactants

Thickening agents

(photoprotective skin care compns. comprising sunscreens,  
structuring agent, and surfactants)

IT 77-99-6 78-79-5, Isoprene, uses 97-90-5 106-99-0, Butadiene,  
uses 110-26-9 112-92-5, 1-Octadecanol 557-40-4, Diallylether  
661-19-8, Behenyl alcohol 999-55-3, Allyl acrylate 1321-74-0,  
Divinyl benzene, uses 1464-69-3 3784-12-1, Pentaerythritol  
monoallyl ether 7370-82-3, Di-(meth)acrylamide 9004-99-3,  
Polyethylene glycol stearate 9005-00-9 12002-22-1 13818-40-1,  
Cyanomethylacrylate 26161-33-1, Polyquaternium 37 35429-19-7  
, Polyquaternium 32 36653-82-4, Cetyl alcohol 41440-38-4,  
Vinyloxyethylacrylate 67167-59-3, Polyethylene glycol stearate  
77221-84-2, Divinyl naphthalene

(photoprotective skin care compns. comprising sunscreens,  
structuring agent, and surfactants)

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE  
RE FORMAT

L61 ANSWER 25 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:78652 HCPLUS

DOCUMENT NUMBER: 130:200964

TITLE: Cleaning material for contact lens

INVENTOR(S): Tsuzuki, Akira; Tanigawa, Sadayasu

PATENT ASSIGNEE(S): Menicon Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11029800	A	19990202	JP 1997-186956	19970711
JP 3402570	B2	20030506		
			JP 1997-186956	19970711

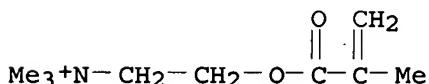
## PRIORITY APPLN. INFO.:

ED Entered STN: 05 Feb 1999  
 AB Title materials contain polymers obtained from unsatd. double bond-containing hydrophilic monomers, unsatd. double bond-containing hydrophobic monomers, unsatd. double bond-containing crosslinking agents, and optionally unsatd. double bond-containing disinfectants. Thus, dimethylacrylamide 30, lauryl methacrylate 70, ethylene glycol dimethacrylate 0.1, trimethyl-N-(methacryloyloxyethyl)ammonium chloride 0.5 g were polymerized in the presence of 2,2'-azobis(2,4-dimethylvaleronitrile) to give a film for cleaning of contact lenses.  
 IT 220869-72-7P 220869-73-8P 220869-74-9P  
 (acrylic polymer films for cleaning of contact lenses)  
 RN 220869-72-7 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide, dodecyl 2-methyl-2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

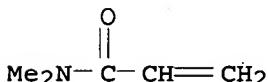
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 2

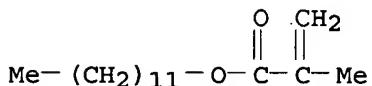
CRN 2680-03-7

CMF C5 H9 N O



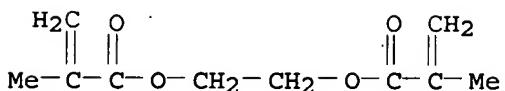
CM 3

CRN 142-90-5  
 CMF C16 H30 O2



CM 4

CRN 97-90-5  
 CMF C10 H14 O4

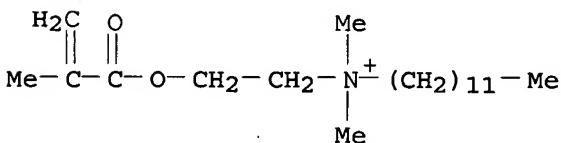


RN 220869-73-8 HCPLUS

CN 1-Dodecanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with N,N-dimethyl-2-propenamide, dodecyl 2-methyl-2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

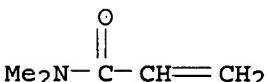
CM 1

CRN 155662-75-2  
 CMF C20 H40 N O2 . Cl

● Cl<sup>-</sup>

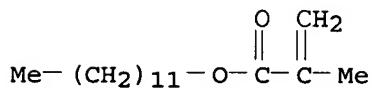
CM 2

CRN 2680-03-7  
 CMF C5 H9 N O



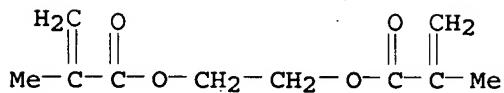
CM 3

CRN 142-90-5  
 CMF C16 H30 O2



CM 4

CRN 97-90-5  
 CMF C10 H14 O4

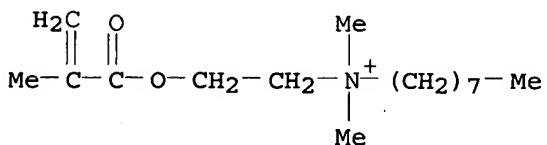


RN 220869-74-9 HCPLUS

CN 1-Octanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with N,N-dimethyl-2-propenamide, 1,2-ethanediyl bis(2-methyl-2-propenoate) and 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

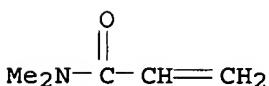
CRN 87431-11-6  
 CMF C16 H32 N O2 . Cl



● Cl-

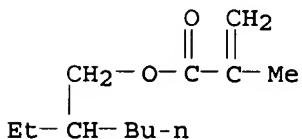
CM 2

CRN 2680-03-7  
 CMF C5 H9 N O



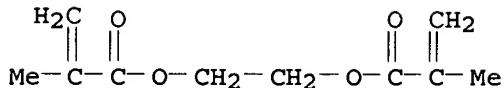
CM 3

CRN 688-84-6  
 CMF C12 H22 O2



CM 4

CRN 97-90-5  
 CMF C10 H14 O4



IC ICM C11D017-00  
 ICS C11D007-60; G02C013-00; C11D007-32; C11D007-26

CC 63-7 (Pharmaceuticals)

Section cross-reference(s) : 38

IT Contact lenses

**Detergents**

(acrylic polymer films for cleaning of contact lenses)

IT 134239-98-8P 220869-72-7P 220869-73-8P  
 220869-74-9P 220869-76-1P 220869-78-3P

(acrylic polymer films for cleaning of contact lenses)

L61 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:604585 HCAPLUS

DOCUMENT NUMBER: 129:235165

TITLE: High-performance branched polymer prepared with  
 chain-transfer agent as flocculating agent and  
 method for wastewater treatment sludge dewatering

INVENTOR(S): Farinato, Raymond; Hawkins, Peter

PATENT ASSIGNEE(S): Cytec Technology Corp., USA

SOURCE: U.S., 7 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5807489	A	19980915	US 1996-747738	19961112
PRIORITY APPLN. INFO.			US 1996-747738	19961112

ED Entered STN: 24 Sep 1998

AB Water-soluble, branched, high mol. weight, cationic polymer flocculants  
 prepared with both a branching agent and a chain-transfer agent to  
 provide bulk viscosity-standard viscosity ratio (BV/SV) 300-500 and

sedimentation value  $\leq 10\%$  are disclosed, as well as methods of making the same and methods of dewatering suspended solids using the same. Thus, an acrylamide-acryloxyethyltrimethylammonium chloride-methylenebisacrylamide copolymer (BV/SV 363, sedimentation value 3) was prepared in the presence of lactic acid chain-transfer agent and an oil phase comprising sorbitan monooleate and ethoxylated linear alcs. in a hydrocarbon solvent, and used to flocculate sewage sludge with drainage volume 140 mL at 10.1 lb/dry ton sludge solids, compared with BV/SV 382, sedimentation value 23, and drainage volume 107 mL for EM 840TPD (acrylamide copolymer).

IT 104888-38-2P, Acrylamide-acryloyloxyethyltrimethylammonium chloride-methylenebisacrylamide copolymer  
(high-performance branched polymer prepared with chain-transfer agent as flocculating agent and method of dewatering therewith)

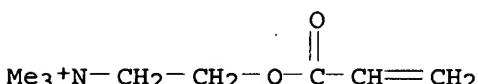
RN 104888-38-2 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (CA INDEX NAME)

CM .1

CRN 44992-01-0

CMF C8 H16 N O2 .. Cl

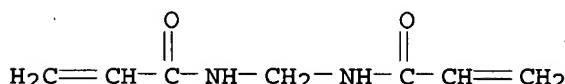


● Cl<sup>-</sup>

CM 2

CRN 110-26-9

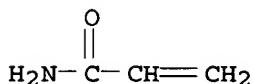
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



IC ICM C02F001-54

INCL 210734000

CC 60-2 (Waste Treatment and Disposal)

IT Crosslinking agents

(chain-transfer agents and; in preparation of high-performance branched polymer as flocculating agent and method of dewatering therewith)

IT 104888-38-2P, Acrylamide-acryloyloxyethyltrimethylammonium chloride-methylenebisacrylamide copolymer

(high-performance branched polymer prepared with chain-transfer agent as flocculating agent and method of dewatering therewith)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:535722 HCAPLUS

DOCUMENT NUMBER: 129:217402

TITLE: Unsaturated quaternary ammonium compounds as crosslinking agents for (meth)acrylic polymers and their uses in polymer coagulants

INVENTOR(S): Aoyama, Kiyoshi

PATENT ASSIGNEE(S): Hymo Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10218797	A	19980818	JP 1997-42838	19970213
PRIORITY APPLN. INFO.:			JP 1997-42838	19970213

OTHER SOURCE(S): MARPAT 129:217402

ED Entered STN: 24 Aug 1998

AB Crosslinking agents are CH<sub>2</sub>:CR1COABN+R2R3ZN+R5R6B'A'COCR4:CH<sub>2</sub>.2X- (I; A, A' = O, NH; B, B' = C<sub>2</sub>H<sub>4</sub>, C<sub>3</sub>H<sub>6</sub>, C<sub>3</sub>H<sub>5</sub>OH; R<sub>1</sub>, R<sub>4</sub> = H, Me; R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub>, R<sub>6</sub> = C<sub>1</sub>-4 alkyls; Z = C<sub>2</sub>H<sub>4</sub>, C<sub>3</sub>H<sub>5</sub>OH; X- = anions). Water-absorbing resins or water-soluble polymers containing I and water-soluble (meth)acrylic monomers are useful as coagulants, dewatering agents for sludges, retention and drainage agents for paper manufacture, and paper strengthening agents. Thus, acryloyloxyethyltrimethylammonium chloride 24.9997, acrylic acid 5, 2-hydroxypropylidene-1,3-bis(N-acryloylaminopropyl)-N,N-dimethylammonium chloride 3 + 10<sup>-4</sup>, and acrylamide 70 mol.% were polymerized to give a coagulant, which was added to a sewage sludge at 1.2% and pressed to give a cake showing water content 66.8%.

IT 208851-29-0P 212330-38-6P

(coagulants; unsatd. quaternary ammonium compds. as crosslinking agents for (meth)acrylic polymers)

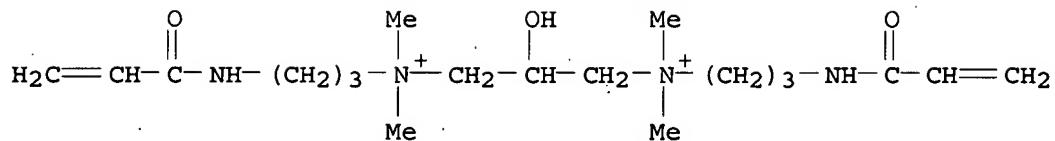
RN 208851-29-0 HCAPLUS

CN 1,3-Propanediaminium, 2-hydroxy-N,N,N',N'-tetramethyl-N,N'-bis[3-[(1-oxo-2-propenyl)amino]propyl]- dichloride, polymer with 2-propenamide, 2-propenoic acid and N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 208851-28-9

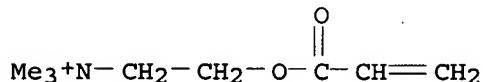
CMF C19 H38 N4 O3 . 2 Cl



● 2 Cl<sup>-</sup>

CM 2

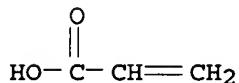
CRN 44992-01-0  
CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

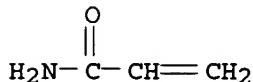
CM 3

CRN 79-10-7  
CMF C3 H4 O2



CM 4

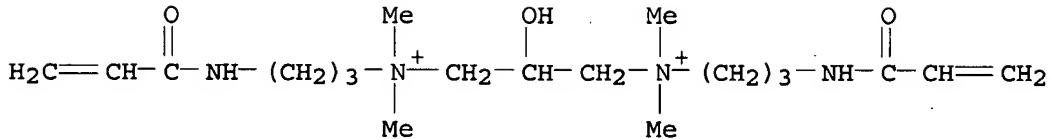
CRN 79-06-1  
CMF C3 H5 N O



RN 212330-38-6 HCAPLUS  
CN 1,3-Propanediaminium, 2-hydroxy-N,N,N',N'-tetramethyl-N,N'-bis[3-[(1-oxo-2-propenyl)amino]propyl]-, dichloride, polymer with 2-propenamide and N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxygen]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

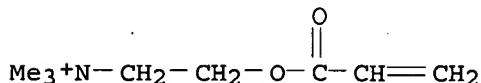
CRN 208851-28-9  
 CMF C19 H38 N4 O3 . 2 Cl



● 2 Cl-

CM 2

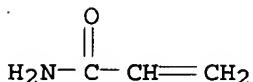
CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl



● Cl-

CM 3

CRN 79-06-1  
 CMF C3 H5 N O



IT 212330-39-7P

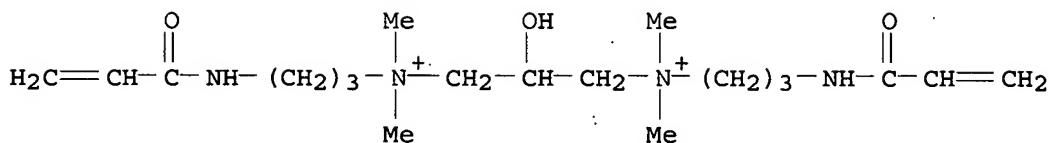
(paper strengthening agents; unsatd. quaternary ammonium compds. as crosslinking agents for (meth)acrylic polymers)

RN 212330-39-7 HCAPLUS

CN 1,3-Propanediaminium, 2-hydroxy-N,N,N',N'-tetramethyl-N,N'-bis[3-[(1-oxo-2-propenyl)amino]propyl]-, dichloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

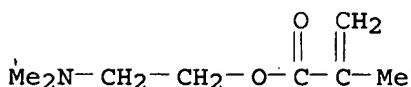
CRN 208851-28-9  
 CMF C19 H38 N4 O3 . 2 Cl



●2 Cl<sup>-</sup>

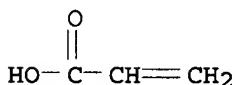
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



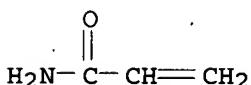
CM 3

CRN 79-10-7  
CMF C3 H4 O2



CM 4

CRN 79-06-1  
CMF C3 H5 N O



IC ICM C07B037-02  
ICS B01D021-01; C02F011-14; C08F226-04; D21H019-20; D21H017-37;  
C08F220-06

CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 43, 60

IT Coagulants

**Crosslinking agents**

(unsatd. quaternary ammonium compds. as crosslinking agents for  
(meth)acrylic polymers)

IT 208851-29-0P 212330-38-6P

(coagulants; unsatd. quaternary ammonium compds. as crosslinking  
agents for (meth)acrylic polymers)

IT 212330-39-7P

(paper strengthening agents; unsatd. quaternary ammonium compds. as crosslinking agents for (meth)acrylic polymers)

L61 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1998:392294 HCAPLUS  
 DOCUMENT NUMBER: 129:129023  
 TITLE: Water-resistant ink-jet printing sheet  
 INVENTOR(S): Furukawa, Akira; Ishimaru, Tomoko  
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10157283	A	19980616	JP 1996-324213	19961204
JP 3707884	B2	20051019		
PRIORITY APPLN. INFO.:			JP 1996-324213	19961204

ED Entered STN: 26 Jun 1998

AB An ink-jet printing sheet comprises an ink-receiving layer on a support, wherein the ink-receiving layer contains a polymer having a functional group -COCH<sub>2</sub>COR<sub>1</sub> (R<sub>1</sub> = alkyl). The polymer may be crosslinked with an aldehyde or N-methylol crosslinking agent. The sheet shows excellent glossiness, ink-reception and water-resistance.

IT 210094-11-4 210094-13-6

(in ink-receiving layer of water-resistant ink-jet printing sheet)

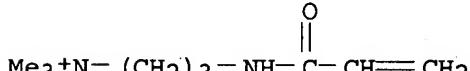
RN 210094-11-4 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 3-oxobutanoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

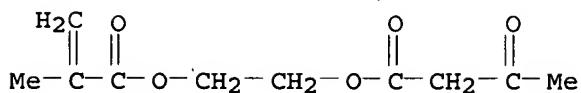
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

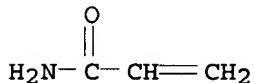
CM 2

CRN 21282-97-3

CMF C10 H14 O5

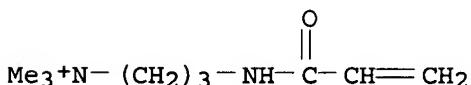


CM 3

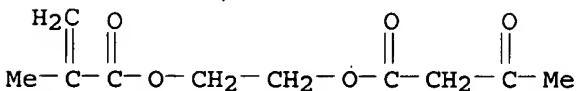
CRN 79-06-1  
CMF C3 H5 N O

RN 210094-13-6 HCPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-(hydroxymethyl)-2-propenamide, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 3-oxobutanoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

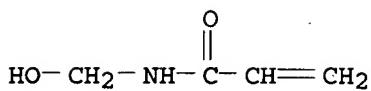
CRN 45021-77-0  
CMF C9 H19 N2 O . Cl● Cl<sup>-</sup>

CM 2

CRN 21282-97-3  
CMF C10 H14 O5

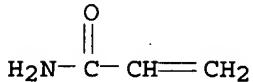
CM 3

CRN 924-42-5  
CMF C4 H7 N O2



CM 4

CRN 79-06-1  
 CMF C3 H5 N O



IC ICM B41M005-00  
 ICS B05D005-04; D21H027-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 IT Crosslinking agents  
 Ink-jet recording sheets  
 (water-resistant ink-jet printing sheet)  
 IT 27516-33-2 56398-91-5 210093-93-9 210093-94-0 210093-95-1  
 210093-96-2 210093-99-5 210094-01-2 210094-03-4 210094-05-6  
 210094-09-0 210094-11-4 210094-13-6 210094-15-8  
 210094-17-0 210094-19-2 210094-20-5 210094-21-6 210094-22-7  
 210094-23-8 210094-24-9 210094-25-0 210094-26-1 210287-25-5  
 210287-26-6 210287-27-7 210287-28-8 210287-29-9  
 (in ink-receiving layer of water-resistant ink-jet printing sheet)

L61 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:502794 HCAPLUS

DOCUMENT NUMBER: 127:123923

TITLE: Compositions containing water-soluble, nitrogen-containing polymers and processes for treating subterranean formations using these compositions

INVENTOR(S): Ahmed, Iqbal; Moradi-Araghi, Ahmad; Hamouda, Aly-anis; Eriksen, Odd Ivar; Patel, Bharatkuma Balubhai; Stewart, Wayne Stephen

PATENT ASSIGNEE(S): Phillips Petroleum Company, USA

SOURCE: PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9722638	A1	19970626	WO 1996-US18174	19961113
W: AU, CA, GB, MX, NO				
US 5650633	A	19970722	US 1995-575928	19951220
US 5708107	A	19980113	US 1995-575429	19951220
US 6051670	A	20000418	US 1995-575434	19951220
US 5922653	A	19990713	US 1996-723635	19961003
AU 9677297	A	19970714	AU 1996-77297	19961113

AU 719976	B2	20000518		
GB 2324095	A	19981014	GB 1998-13343	19961113
GB 2340496	A	20000223	GB 1999-30053	19961113
US 5763610	A	19980609	US 1997-803697	19970221
US 5883210	A	19990316	US 1997-951213	19970919
NO 9802888	A	19980820	NO 1998-2888	19980619
NO 322844	B1	20061211		
NO 2005004619	A	19980820	NO 2005-4619	20051007
PRIORITY APPLN. INFO.:				
			US 1995-575429	A 19951220
			US 1995-575434	A 19951220
			US 1995-575928	A 19951220
			US 1996-723635	A 19961003
			GB 1998-13343	A3 19961113
			WO 1996-US18174	W 19961113

OTHER SOURCE(S) : MARPAT 127:123923

ED Entered STN: 09 Aug 1997

AB The compns. contain clay or a crosslinker, a liquid such as water, and a water-soluble polymer having repeat units derived from monomers containing N-containing heterocycles, and(or) quaternized N-containing groups. These compns. can be used as or in compns. for enhanced oil recovery, drilling fluids, workover fluids, completion fluids, or combination of any two or more thereof. A typical polymer was manufactured by radical-polymerization of 80 parts acrylamide with 20 parts N-acryloyl-N'-methylpiperazine.

IT 192873-61-3P 192873-66-8P

(compns. containing water-soluble, nitrogen-containing polymers and processes

for treating subterranean formations using these compns.)

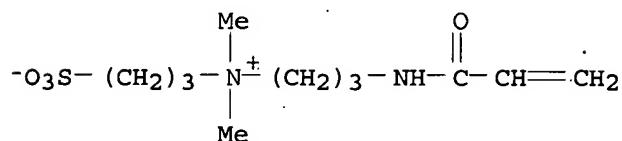
RN 192873-61-3 HCPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[3-[(1-oxo-2-propenyl)amino]propyl]-3-sulfo-, inner salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 80293-60-3

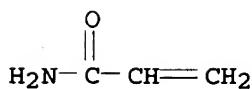
CMF C11 H22 N2 O4 S



CM 2

CRN 79-06-1

CMF C3 H5 N O



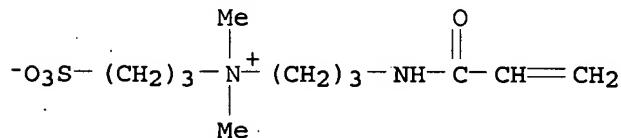
RN 192873-66-8 HCPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[3-[(1-oxo-2-propenyl)amino]propyl]-3-sulfo-, inner salt, polymer with 1-methyl-4-(1-oxo-2-propenyl)piperazine and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 80293-60-3

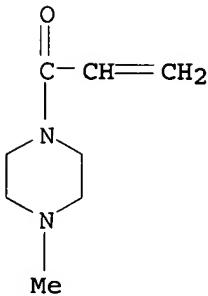
CMF C11 H22 N2 O4 S



CM 2

CRN 50658-92-9

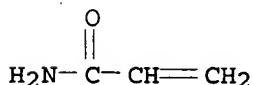
CMF C8 H14 N2 O



CM 3

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F026-06

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 35

IT Crosslinking agents

## Drilling fluids

(compns. containing water-soluble, nitrogen-containing polymers and processes

for treating subterranean formations using these compns.)

IT 24937-54-0P 61256-65-3P 103445-92-7P 189303-04-6P 192873-54-4P  
 192873-57-7P 192873-59-9P 192873-61-3P 192873-63-5P  
 192873-66-8P 192873-68-0P 192873-70-4P 192873-73-7P  
 192873-75-9P 192873-77-1P

(compns. containing water-soluble, nitrogen-containing polymers and processes

for treating subterranean formations using these compns.)

L61 ANSWER 30 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:82482 HCPLUS

DOCUMENT NUMBER: 126:131819

TITLE: Inverse-emulsion copolymerization of acrylamide and quaternary ammonium cationic monomers with block copolymeric surfactants: copolymer composition control using batch and semi-batch techniques

AUTHOR(S): Hernandez-Barajas, Jose; Hunkeler, David J.

CORPORATE SOURCE: Dep. Chem. Eng., Vanderbilt Univ., Nashville, TN, 37235, USA

SOURCE: Polymer (1997), 38(2), 449-458

CODEN: POLMAG; ISSN: 0032-3861

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 05 Feb 1997

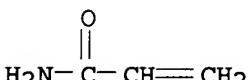
AB The inverse emulsion copolyrn. of acrylamide and MeCl-quaternized 2-(dimethylamino)ethyl acrylate (DMAEA) and 2-(dimethylamino)ethyl methacrylate (DMAEM) was carried out using a block copolymeric surfactant, poly(ethylene oxide)-b-poly(12-hydroxystearate) (HB246), or sorbitan monooleate (SMO). The choice of surfactant influences the quality of the copolymers. For example, more uniform acrylamide-DMAEA copolymers were obtained using HB246 at faster production rates than with SMO in batch reactors. However, a composition drift is observed in the copolyrn. of acrylamide and DMAEM using HB246. A possible explanation for this behavior is either a reduced reactivity ratio or propagation constant Acrylamide-DMAEM copolymers of more uniform composition can be produced by implementing simple semi-batch procedures with non-time-varying feed rates. These cationic copolymers should have a higher flocculation efficiency in municipal and industrial water treatment due to their more uniform distribution of pos. charge along the polyacrylamide backbone.

IT 79-06-1, 2-Propenamide, reactions

(kinetics of inverse emulsion copolyrn. of cationic acrylates and)

RN 79-06-1 HCPLUS

CN 2-Propenamide (CA INDEX NAME)

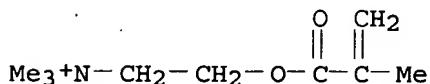


IT 35429-19-7P, Acrylamide-[2-(methacryloyloxy)ethyl]trimethylamm onium chloride copolymer 69418-26-4P, Acrylamide-[2-(acryloyloxy)ethyl]trimethylammonium chloride copolymer (preparation by inverse emulsion copolyrn. in presence of block

copolymer surfactant)  
 RN 35429-19-7 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

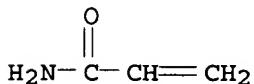
CM 1

CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 2

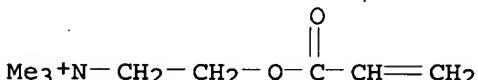
CRN 79-06-1  
 CMF C3 H5 N O



RN 69418-26-4 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

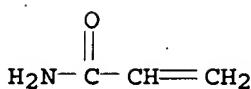
CM 1

CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
 CMF C3 H5 N O



- CC 35-3 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 46, 60, 61  
 IT 79-06-1, 2-Propenamide, reactions  
 (kinetics of inverse emulsion copolyrn. of cationic acrylates and)  
 IT 35429-19-7P, Acrylamide-[2-(methacryloyloxy)ethyl]trimethylamm  
 onium chloride copolymer 69418-26-4P, Acrylamide-[2-  
 (acryloyloxy)ethyl]trimethylammonium chloride copolymer  
 (preparation by inverse emulsion copolyrn. in presence of block  
 copolymer surfactant)

L61 ANSWER 31 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:56041 HCPLUS

DOCUMENT NUMBER: 126:76248

TITLE: Transparent coatings containing acrylic polymers  
 and multiple crosslinking agents other than  
 organic silanes

INVENTOR(S): Kageyama, Shigekazu

PATENT ASSIGNEE(S): Kageyama, Rika, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08283652	A	19961029	JP 1995-81450	19950406
PRIORITY APPLN. INFO.:			JP 1995-81450	19950406

ED Entered STN: 27 Jan 1997

AB Title coatings showing improved adhesion to substrates and resistance to clouding, water, heat, etc. consist of polymers comprising dimethylaminoethyl methacrylate (I), I MeCl salt (II), 2-hydroxyethyl methacrylate (III), poly(oxyethylene) methacrylate (IV), and carboxyl-substituted compds. and ≥3 hardeners selected from oxazolines, isocyanates, 1,4-bis(chloromethyl)benzene (V), and organic titanates. Thus, 80% 80:20 mixture of I and II and 20% 40:60 mixture of III and IV were blended then 90% the composition and 10% 60:40 mixture of acrylonitrile and methacrylic acid were blended in 180% mixture of iso-Pr alc. and MEK and 2% AIBN, polymerized at 75-80° in N, and diluted by MeOH to give a solution, which was mixed with Sumidur 44V-10 (isocyanate) 2.5, V 4, (BuO)4Ti 1.5, and 2-isopropenyl-2-oxazoline 2% (ion polymer solids), and diluted by a mixture of MePh, MEK, and MeOH. Then, the composition at 15% concentration was applied on a polyester film and dried at 120° for 40 min to give a coating showing cross-cut adhesion 100/100, light transmittance 90.3%, haze 0.1, good water absorbance, and good penetration of water-thinned color ink.

IT 185389-79-1P  
 (transparent coatings containing acrylic polymers and multiple crosslinking agents other than organic silanes)

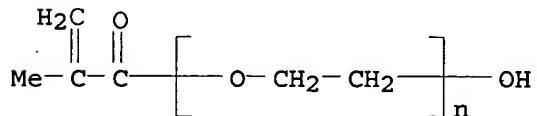
RN 185389-79-1 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 1,4-bis(chloromethyl)benzene, 1-butanol titanium(4+) salt, 4,5-dihydro-2-(1-methylethenyl)oxazole,

2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), polymethylenepolyphenylene isocyanate, 2-propenenitrile and 2-propenoic acid (9CI) (CA INDEX NAME)

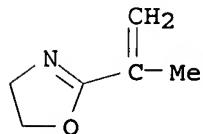
CM 1

CRN 25736-86-1  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>4</sub> H<sub>6</sub> O<sub>2</sub>  
 CCI PMS



CM 2

CRN 10471-78-0  
 CMF C<sub>6</sub> H<sub>9</sub> N O



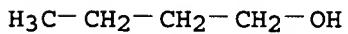
CM 3

CRN 9016-87-9  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 4

CRN 5593-70-4  
 CMF C<sub>4</sub> H<sub>10</sub> O . 1/4 Ti

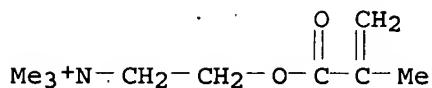


● 1/4 Ti (IV)

CM 5

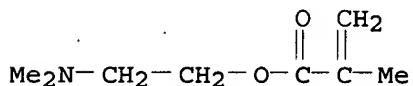
CRN 5039-78-1

CMF C9 H18 N O2 . Cl

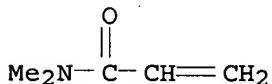


● Cl -

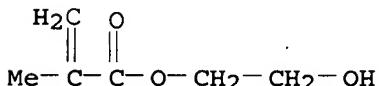
CM 6.

CRN 2867-47-2  
CMF C8 H15 N O2

CM 7

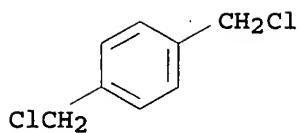
CRN 2680-03-7  
CMF C5 H9 N O

CM 8

CRN 868-77-9  
CMF C6 H10 O3

CM 9

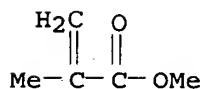
CRN 623-25-6  
CMF C8 H8 Cl2



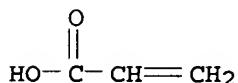
CM 10

CRN 107-13-1  
CMF C3 H3 N

CM 11

CRN 80-62-6  
CMF C5 H8 O2

CM 12

CRN 79-10-7  
CMF C3 H4 O2

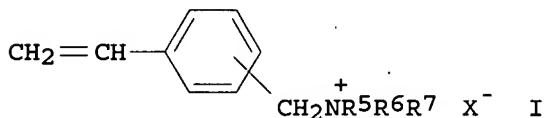
IC ICM C09D133-14  
ICS C08J007-04; C09D175-04; C09D179-00  
CC 42-10 (Coatings, Inks, and Related Products)  
IT Crosslinking agents  
(transparent coatings containing acrylic polymers and multiple crosslinking agents other than organic silanes)  
IT 185389-76-8P 185389-77-9P 185389-78-0P 185389-79-1P  
(transparent coatings containing acrylic polymers and multiple crosslinking agents other than organic silanes)

L61 ANSWER 32 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1995:982873 HCAPLUS  
DOCUMENT NUMBER: 124:160424  
TITLE: Ink-jet recording material with improved transparency and gloss  
INVENTOR(S): Ikeda, Mitsuhiro; Furukawa, Akira; Kato, Makoto  
PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07257016	A	19951009	JP 1994-48355	19940318
PRIORITY APPLN. INFO.:			JP 1994-48355	19940318

ED Entered STN: 14 Dec 1995  
 GI



AB The material consists of a support coated with an ink-absorbing layer containing a water-soluble quaternary ammonium salt-containing polymer and a layer containing organic polymer fine particles (ink-absorbing layer coverage ratio 1-50 weight% ) and 1-100 weight% of an alc.- or water-soluble polymer (<0.3 g/m<sup>2</sup>). The quaternary ammonium salt-containing polymer may obtained by polymerization of  $\text{CH}_2:\text{C}(\text{R}1)[\text{C}(:\text{O})\text{Q}(\text{CH}_2)\text{nN}+\text{R}2\text{R}3\text{R}4\text{X}^-]$ , a styrene derivative I, and  $\text{CH}_2:\text{CHCH}_2\text{N}+\text{R}8\text{R}9\text{R}10\text{X}^-$  ( $\text{R}1 = \text{H}, \text{Me}; \text{Q} = \text{O}, \text{NH}; \text{R}2-7 = \text{Me}, \text{Et}; \text{X}^- = \text{halo}, \text{SO}_3^-, \text{alkylsulfonic acid anion, AcO}^-, \text{alkylcarboxylic acid anion}; \text{n} = 2, 3; \text{R}8-10 = \text{Me}, \text{Et, allyl}$ ). The material showed good transparency and water resistance.

IT 75150-29-7P 172785-52-3P 172785-53-4P  
 173255-41-9P 173255-42-0P  
 (ink-jet recording materials having quaternary ammonium salt-containing polymer ink-absorbing layer with good gloss and transparency)

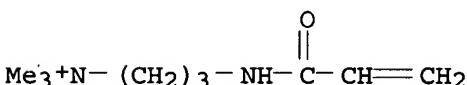
RN 75150-29-7 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propen-1-yl)amino]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

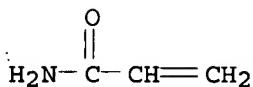


● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



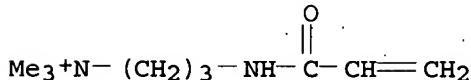
RN 172785-52-3 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

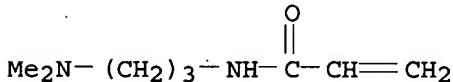


● Cl-

CM 2

CRN 3845-76-9

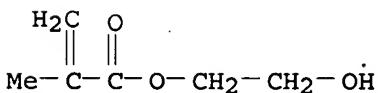
CMF C8 H16 N2 O



CM 3

CRN 868-77-9

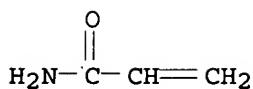
CMF C6 H10 O3



CM 4

CRN 79-06-1

CMF C3 H5 N O



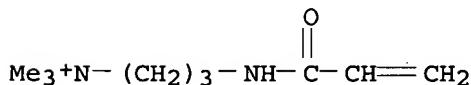
RN 172785-53-4 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, 2-propenamide and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

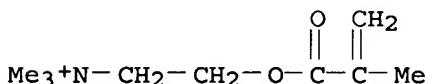


● Cl-

CM 2

CRN 5039-78-1

CMF C9 H18 N O2 . Cl

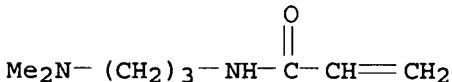


● Cl-

CM 3

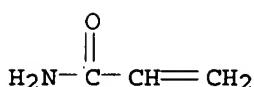
CRN 3845-76-9

CMF C8 H16 N2 O



CM 4

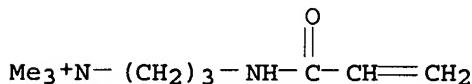
CRN 79-06-1  
 CMF C3 H5 N O



RN 173255-41-9 HCPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

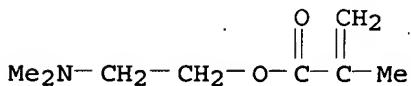
CRN 45021-77-0  
 CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

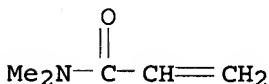
CM 2

CRN 2867-47-2  
 CMF C8 H15 N O2



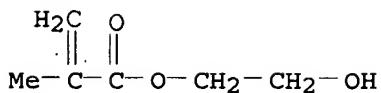
CM 3

CRN 2680-03-7  
 CMF C5 H9 N O



CM 4

CRN 868-77-9  
 CMF C6 H10 O3



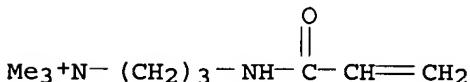
RN 173255-42-0 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI). (CA INDEX NAME)

CM 1

CRN 45021-77-0

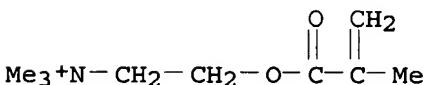
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 5039-78-1

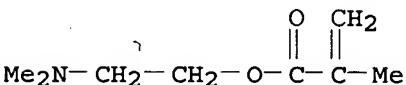
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 3

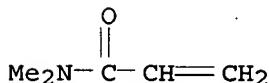
CRN 2867-47-2

CMF C8 H15 N O2



CM 4

CRN 2680-03-7  
CMF C5 H9 N O



- IC ICM B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38  
 IT Crosslinking agents  
     (epoxy resins; ink-jet recording materials having quaternary ammonium salt-containing polymer ink-absorbing layer with good gloss and transparency)  
 IT 26590-05-6P, Acrylamide-diallyldimethylammonium chloride copolymer  
 73363-10-7P 75150-29-7P 172785-52-3P  
 172785-53-4P 173255-41-9P 173255-42-0P  
 173255-43-1P 173255-44-2P  
     (ink-jet recording materials having quaternary ammonium salt-containing polymer ink-absorbing layer with good gloss and transparency)

L61 ANSWER 33 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1993:583181 HCAPLUS  
 DOCUMENT NUMBER: 119:183181  
 TITLE: Paper strengthening agents from branched acrylamide copolymers  
 INVENTOR(S): Saikai, Hiroaki; Murata, Noryasu; Tanimoto, Shinichiro  
 PATENT ASSIGNEE(S): Arakawa Chem Ind, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05086597	A	19930406	JP 1991-270290	19910920
JP 3089747	B2	20000918		

PRIORITY APPLN. INFO.: JP 1991-270290 19910920

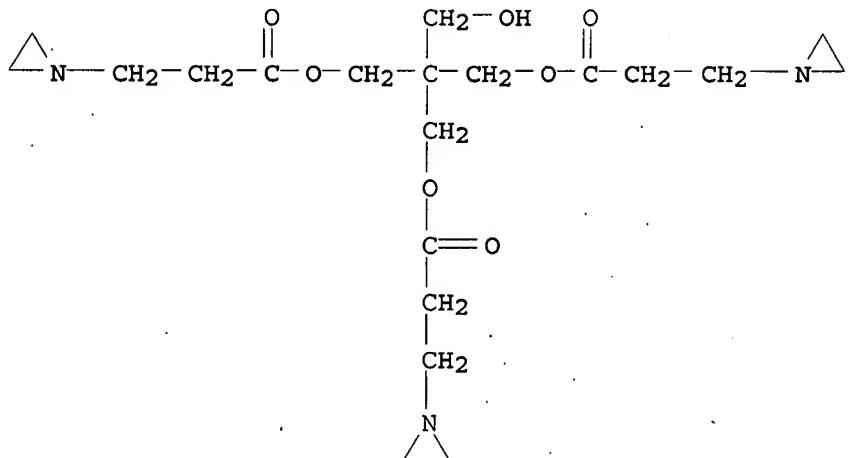
- ED Entered STN: 30 Oct 1993  
 AB The title copolymers are derived from (meth)acrylamide, anionic group-containing comonomers, cationic group-containing comonomers, and/or anionic group-containing comonomers, and crosslink with polyaziridinyl compds. Redox catalyst-initiated polymerization of acrylamide 90, acrylic acid 5 and dimethylaminoethyl methacrylate 5, and crosslinking with tetramethylolmethane-tri-β-aziridinyl propionate 0.03 part gave a title agent.  
 IT 150469-14-0P  
     (paper strengthening agents, manufacture of)  
 RN 150469-14-0 HCAPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate),

2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

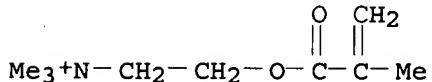
CMF C20 H33 N3 O7



CM 2

CRN 5039-78-1

CMF C9 H18 N O2 . Cl

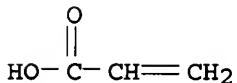


● Cl<sup>-</sup>

CM 3

CRN 79-10-7

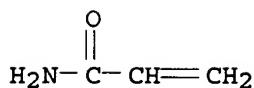
CMF C3 H4 O2



CM 4

CRN 79-06-1

CMF C3 H5 N O



IC ICM D21H017-37  
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)  
 IT Crosslinking agents  
     (polyaziridinyl compds. as, for acrylamide polymers for paper  
     strength agents)  
 IT 150415-60-4P 150415-61-5P 150415-62-6P 150415-63-7P  
     150415-64-8P 150469-14-0P  
     (paper strengthening agents, manufacture of)

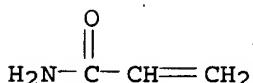
L61 ANSWER 34 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1993:175517 HCPLUS  
 DOCUMENT NUMBER: 118:175517  
 TITLE: Ampholyte terpolymers providing superior  
       conditioning properties in skin and nail-care  
       products  
 INVENTOR(S): Chen, Shih Ruey Thomas; Matz, Gary F.; Vaughan,  
                 Craig W.; Melby, Allen L.  
 PATENT ASSIGNEE(S): Calgon Corp., USA  
 SOURCE: Eur. Pat. Appl., 21 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 522756	A1	19930113	EP 1992-305922	19920626
EP 522756	B1	19960131		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
CA 2072319	A1	19921229	CA 1992-2072319	19920625
CA 2072319	C	20051122		
AU 9218638	A	19930107	AU 1992-18638	19920626
ZA 9204761	A	19930331	ZA 1992-4761	19920626
AT 133559	T	19960215	AT 1992-305922	19920626
ES 2084288	T3	19960501	ES 1992-305922	19920626
KR 216098	B1	19990816	KR 1992-11184	19920626
JP 05221848	A	19930831	JP 1992-210632	19920629
JP 07076169	B	19950816		
AU 9532934	A	19951207	AU 1995-32934	19950927
PRIORITY APPLN. INFO.:			US 1991-723003	A 19910628
			US 1992-896637	A 19920617
			US 1991-722637	A 19910628
			US 1991-722638	A 19910628
			US 1991-723001	A 19910628

ED Entered STN: 01 May 1993  
 AB Ampholyte terpolymers having an average mol. weight of  $1\times 10^4$ - $1\times 10^7$   
       comprise a nonionic monomer, a cationic monomer, and an anionic

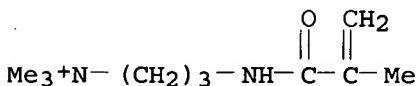
monomer. The terpolymers are added to skin and nail care products at 0.1-10% to improve softening and moisturizing effects. Thus, a hand lotion contained stearic acid 7.0, C12-15 alkyl benzoate 0.5, sorbitan oleate 0.5, Polysorbate-60 2.50, sorbitol 10.0, N-vinylpyrrolidinone-dimethyldiethylammonium chloride-acrylic acid terpolymer 1.50, and water 78.0%.

IT 79-06-1D, 2-Propenamide, copolymers with acrylic acid and aminomethacrylate derivative 84647-38-1 87105-94-0  
 109578-73-6 146735-81-1 146757-47-3  
 146757-53-1 146757-54-2 146757-55-3  
 (cosmetics containing, as moisturizer)  
 RN 79-06-1 HCAPLUS  
 CN 2-Propenamide (CA INDEX NAME)



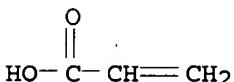
RN 84647-38-1 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propen-1-yl)amino]-, chloride (1:1), polymer with 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 51410-72-1  
CMF C10 H21 N2 O . Cl

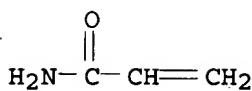
● Cl -

CM 2

CRN 79-10-7  
CMF C3 H4 O2

CM 3

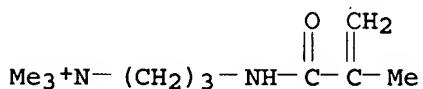
CRN 79-06-1  
CMF C3 H5 N O



RN 87105-94-0 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

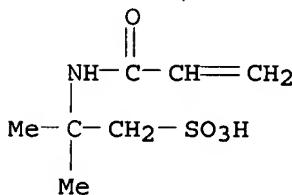
CRN 51410-72-1  
 CMF C10 H21 N2 O . Cl



● Cl-

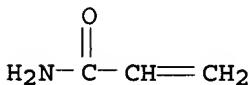
CM 2

CRN 15214-89-8  
 CMF C7 H13 N O4 S



CM 3

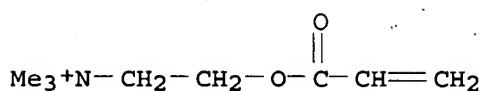
CRN 79-06-1  
 CMF C3 H5 N O



RN 109578-73-6 HCAPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

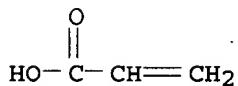
CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

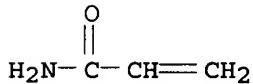
CM 2

CRN 79-10-7  
 CMF C3 H4 O2



CM 3

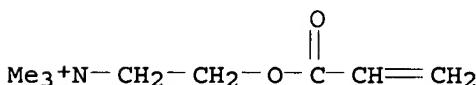
CRN 79-06-1  
 CMF C3 H5 N O



RN 146735-81-1 HCPLUS  
 CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
 2-propenamide, 2-propenoic acid and N,N,N-trimethyl-2-[(1-oxo-2-  
 propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

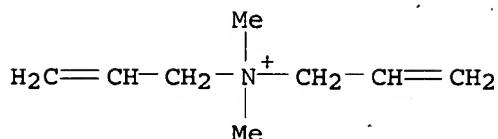
CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl



● Cl<sup>-</sup>

CM 2

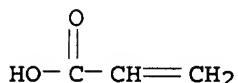
CRN 7398-69-8  
 CMF C8 H16 N Cl



● Cl -

CM 3

CRN 79-10-7  
 CMF C3 H4 O2



CM 4

CRN 79-06-1  
 CMF C3 H5 N O

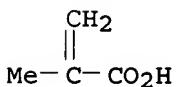


RN 146757-47-3 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-methyl-2-propenoic acid and 2-propenamide (9CI) (CA INDEX NAME)

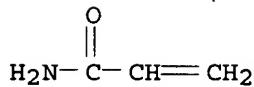
CM 1

CRN 79-41-4  
 CMF C4 H6 O2



CM 2

CRN 79-06-1  
CMF C3 H5 N O

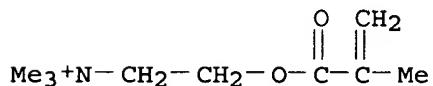


CM 3

CRN 6891-44-7  
CMF C9 H18 N O2 . C H3 O4 S

CM 4

CRN 33611-56-2  
CMF C9 H18 N O2



CM 5

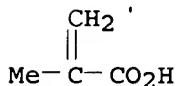
CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 146757-53-1 HCPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-methyl-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

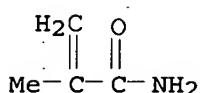
CM 1

CRN 79-41-4  
CMF C4 H6 O2



CM 2

CRN 79-39-0  
CMF C4 H7 N O

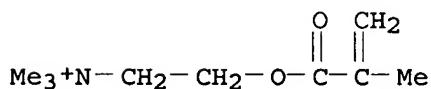


CM 3

CRN 6891-44-7  
 CMF C9 H18 N O2 . C H3 O4 S

CM 4

CRN 33611-56-2  
 CMF C9 H18 N O2



CM 5

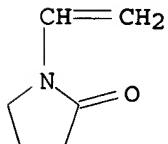
CRN 21228-90-0  
 CMF C H3 O4 S.

 $\text{Me}-\text{O}-\text{SO}_3^-$ 

RN 146757-54-2 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 1-ethenyl-2-pyrrolidinone, 2-methyl-2-propenoic acid and 2-propenamide (9CI) (CA INDEX NAME)

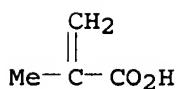
CM 1

CRN 88-12-0  
 CMF C6 H9 N O

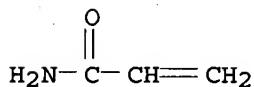


CM 2

CRN 79-41-4  
 CMF C4 H6 O2



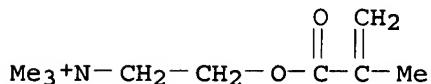
CM 3

CRN 79-06-1  
CMF C3 H5 N O

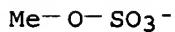
CM 4

CRN 6891-44-7  
CMF C9 H18 N O2 . C H3 O4 S

CM 5

CRN 33611-56-2  
CMF C9 H18 N O2

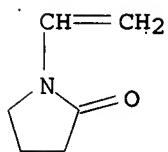
CM 6

CRN 21228-90-0  
CMF C H3 O4 S

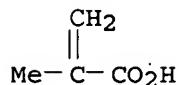
RN 146757-55-3 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 1-ethenyl-2-pyrrolidinone, 2-methyl-2-propenoic acid, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

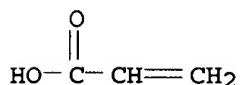
CRN 88-12-0  
CMF C6 H9 N O



CM 2

CRN 79-41-4  
CMF C4 H6 O2

CM 3

CRN 79-10-7  
CMF C3 H4 O2

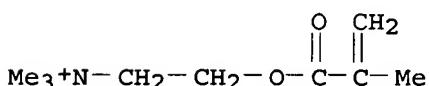
CM 4

CRN 79-06-1  
CMF C3 H5 N O

CM 5

CRN 6891-44-7  
CMF C9 H18 N O2 . C H3 O4 S

CM 6

CRN 33611-56-2  
CMF C9 H18 N O2

CM 7

CRN 21228-90-0  
CMF C H3 O4 SMe-O-SO<sub>3</sub>-

IC ICM A61K007-48  
 ICS A61K007-04; C11D003-37  
 CC 62-4 (Essential Oils and Cosmetics)  
 IT **Detergents**  
 (dishwashing, liquid, ampholyte terpolymers as skin conditioning agents in)

IT 79-06-1D, 2-Propenamide, copolymers with acrylic acid and aminomethacrylate derivative 79-10-7D, 2-Propenoic acid, esters, polymers 2867-47-2D, alkyl derivs., copolymer with acrylate and dimethylallylammonium chloride 7398-69-8D, copolymers with acrylate and acrylic acid 25136-75-8 84647-38-1 87105-88-2  
 87105-93-9 87105-94-0 105030-62-4 105614-90-2  
 107048-94-2 109578-73-6 111818-54-3D, copolymers with acrylate and aminomethacrylate derivative 118518-53-9 118518-54-0  
 146735-75-3 146735-76-4 146735-77-5 146735-78-6 146735-79-7  
 146735-80-0 146735-81-1 146735-82-2 146735-83-3  
 146757-46-2 146757-47-3 146757-48-4 146757-49-5  
 146757-50-8 146757-51-9 146757-52-0 146757-53-1  
 146757-54-2 146757-55-3 146757-56-4 146757-57-5  
 146757-58-6 146757-59-7 146757-60-0 146757-61-1  
 (cosmetics containing, as moisturizer)

L61 ANSWER 35 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1992:429099 HCAPLUS  
 DOCUMENT NUMBER: 117:29099  
 TITLE: Water-soluble acrylamide polymers as papermaking additives  
 INVENTOR(S): Kimura, Yoshiharu; Kasuya, Tadashi; Hamada, Masao  
 PATENT ASSIGNEE(S): Harima Kasei K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04046915	A	19920217	JP 1990-158240	19900615
PRIORITY APPLN. INFO.:			JP 1990-158240	19900615

ED Entered STN: 26 Jul 1992  
 AB Title polymers are prepared by polymerizing (meth)acrylamide 70-98.5, water-soluble anionic and/or cationic comonomers and/or their salts 1-20, and hydrophobic comonomers and/or their salts 0.5-10 mol %. An aqueous mixture containing acrylamide 89, itaconic acid 3, maleic acid 1, dimethylaminoethyl methacrylate (I) 2, PhCH<sub>2</sub>Cl-quaternized I 2, and styrene 3 mol was polymerized in the presence of iso-PrOH, ammonium persulfate, and NaHSO<sub>3</sub> at pH 4.0 and ≥85° for 1 h to

give a polymer solution (15.2% solids; viscosity 9300 cP; mol. weight 1.91 + 106) which was used in paper manufacture, giving high burst and compressive strengths.

IT 142250-56-4P 142250-57-5P 142250-58-6P  
 142250-61-1P 142250-63-3P 142250-64-4P  
 142250-65-5P 142250-67-7P 142250-70-2P  
 142276-84-4P 142276-85-5P

(preparation of, as paper strength improvers)

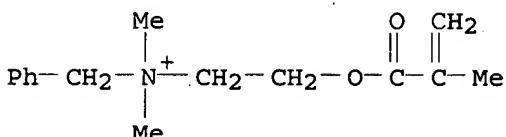
RN 142250-56-4 HCPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with (2Z)-2-butenedioic acid, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, methylenebutanedioic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 46917-07-1

CMF C15 H22 N O2 . Cl

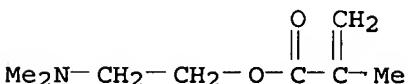


● Cl<sup>-</sup>

CM 2

CRN 2867-47-2

CMF C8 H15 N O2

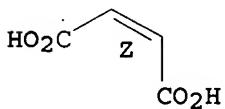


CM 3

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



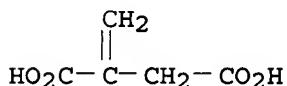
CM 4

CRN 100-42-5  
 CMF C8 H8



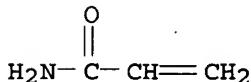
CM 5

CRN 97-65-4  
 CMF C5 H6 O4



CM 6

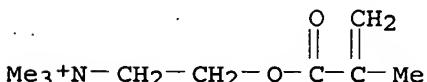
CRN 79-06-1  
 CMF C3 H5 N O



RN 142250-57-5 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, methylenebutanedioic acid, (1-methylethenyl)benzene, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

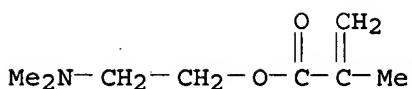
CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl



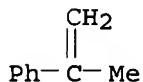
● Cl<sup>-</sup>

CM 2

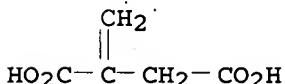
CRN 2867-47-2  
 CMF C8 H15 N O2



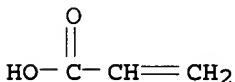
CM 3

CRN 98-83-9  
CMF C9 H10

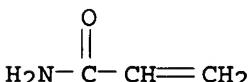
CM 4

CRN 97-65-4  
CMF C5 H6 O4

CM 5

CRN 79-10-7  
CMF C3 H4 O2

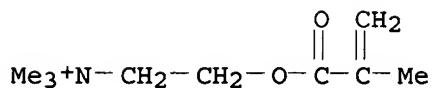
CM 6

CRN 79-06-1  
CMF C3 H5 N O

RN 142250-58-6 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with (2Z)-2-butenedioic acid, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, methylenebutanedioic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

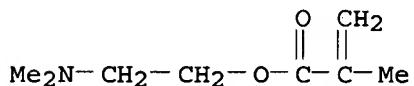
CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl



● Cl -

CM 2

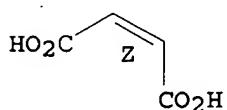
CRN 2867-47-2  
 CMF C8 H15 N O2



CM 3

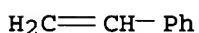
CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.



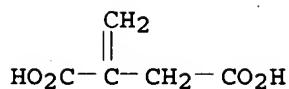
CM 4

CRN 100-42-5  
 CMF C8 H8

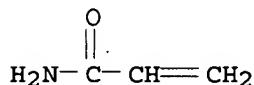


CM 5

CRN 97-65-4  
 CMF C5 H6 O4



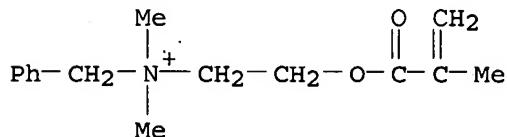
CM 6

CRN 79-06-1  
CMF C3 H5 N O

RN 142250-61-1 HCPLUS

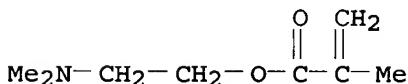
CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxyethyl]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, (1-methylethenyl)benzene, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 46917-07-1  
CMF C15 H22 N O2 . Cl

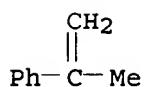
● Cl -

CM 2

CRN 2867-47-2  
CMF C8 H15 N O2

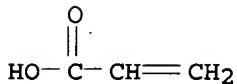
CM 3

CRN 98-83-9  
CMF C9 H10



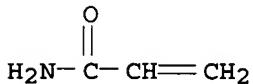
CM 4

CRN 79-10-7  
CMF C3 H4 O2



CM 5

CRN 79-06-1  
CMF C3 H5 N O



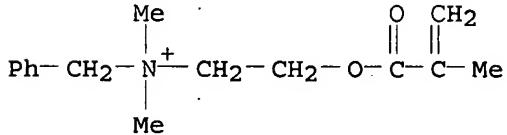
RN 142250-63-3 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, methylenebutanedioic acid, 2-propenamide and 2-propenoic acid (9CI)  
(CA INDEX NAME)

CM 1

CRN 46917-07-1

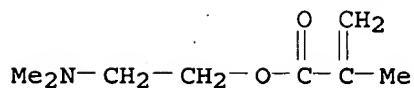
CMF C15 H22 N O2 . Cl



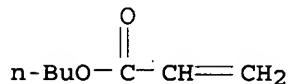
●  $\text{Cl}^-$

CM 2

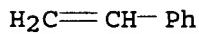
CRN 2867-47-2  
CMF C8 H15 N O2



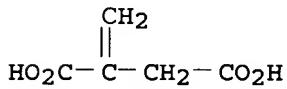
CM 3

CRN 141-32-2  
CMF C7 H12 O2

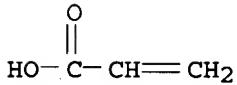
CM 4

CRN 100-42-5  
CMF C8 H8

CM 5

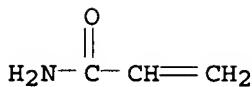
CRN 97-65-4  
CMF C5 H6 O4

CM 6

CRN 79-10-7  
CMF C3 H4 O2

CM 7

CRN 79-06-1  
CMF C3 H5 N O



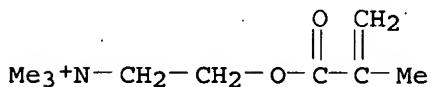
RN 142250-64-4 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, methylenebutanedioic acid, 2-methylpropyl 2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

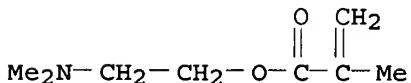
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 2867-47-2

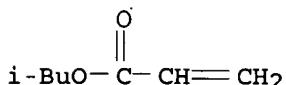
CMF C8 H15 N O2



CM 3

CRN 106-63-8

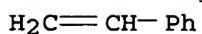
CMF C7 H12 O2



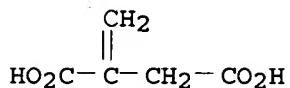
CM 4

CRN 100-42-5

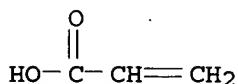
CMF C8 H8



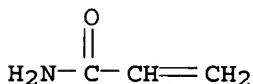
CM 5

CRN 97-65-4  
CMF C5 H6 O4

CM 6

CRN 79-10-7  
CMF C3 H4 O2

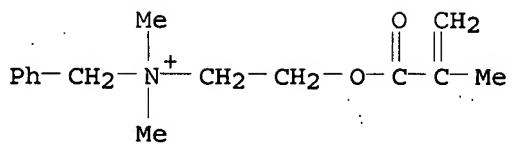
CM 7

CRN 79-06-1  
CMF C3 H5 N O

RN 142250-65-5 HCPLUS  
 CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, methylenebutanedioic acid, 2-methylpropyl 2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

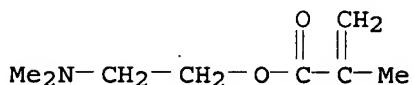
CRN 46917-07-1  
CMF C15 H22 N O2 . Cl



● Cl -

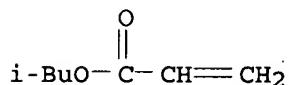
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



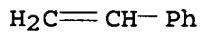
CM 3

CRN 106-63-8  
CMF C7 H12 O2



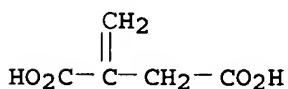
CM 4

CRN 100-42-5  
CMF C8 H8



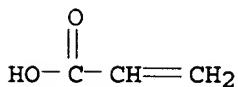
CM 5

CRN 97-65-4  
CMF C5 H6 O4



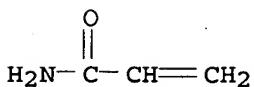
CM 6

CRN 79-10-7  
CMF C3 H4 O2



CM 7

CRN 79-06-1  
CMF C3 H5 N O

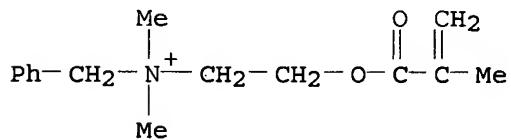


RN 142250-67-7 HCPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxyethyl]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, N,N'-methylenebis[2-propenamide], methylenebutanedioic acid, (1-methylethenyl)benzene, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

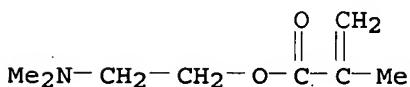
CRN 46917-07-1  
CMF C15 H22 N O2 . Cl



● Cl -

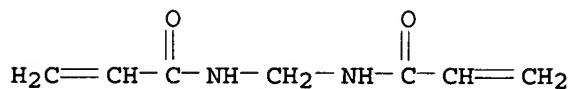
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



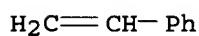
CM 3

CRN 110-26-9  
CMF C7 H10 N2 O2



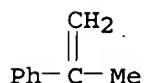
CM 4

CRN 100-42-5  
CMF C8 H8



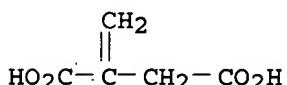
CM 5

CRN 98-83-9  
CMF C9 H10



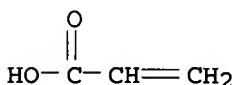
CM 6

CRN 97-65-4  
CMF C5 H6 O4



CM 7

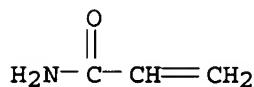
CRN 79-10-7  
CMF C3 H4 O2



CM 8

CRN 79-06-1

CMF C3 H5 N O



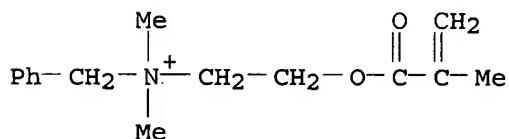
RN 142250-70-2 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with (2Z)-2-butenedioic acid, ethenylbenzene, N,N'-methylenebis[2-propenamide], methylenebutanedioic acid and 2-propanamide (9CI) (CA INDEX NAME)

CM 1

CRN 46917-07-1

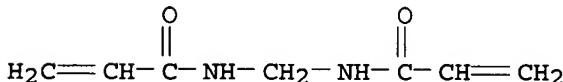
CMF C15 H22 N O2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 110-26-9

CMF C7 H10 N2 O2

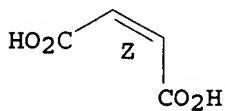


CM 3

CRN 110-16-7

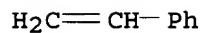
CMF C4 H4 O4

Double bond geometry as shown.



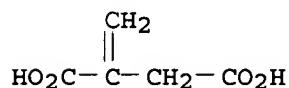
CM 4

CRN 100-42-5  
CMF C8 H8



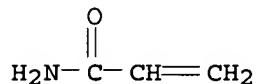
CM 5

CRN 97-65-4  
CMF C5 H6 O4



CM 6

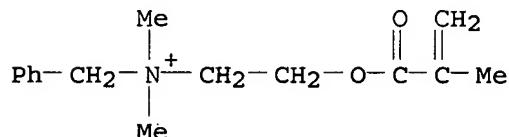
CRN 79-06-1  
CMF C3 H5 N O



RN 142276-84-4 HCPLUS  
CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with ethenylbenzene, methylenebutanedioic acid, (1-methylethenyl)benzene, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

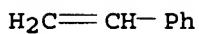
CRN 46917-07-1  
CMF C15 H22 N O2 . Cl



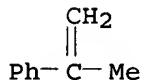
● Cl<sup>-</sup>

CM 2

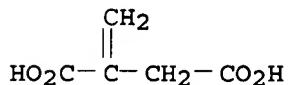
CRN 100-42-5  
CMF C8 H8



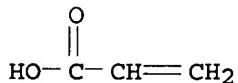
CM 3

CRN 98-83-9  
CMF C9 H10

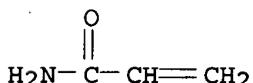
CM 4

CRN 97-65-4  
CMF C5 H6 O4

CM 5

CRN 79-10-7  
CMF C3 H4 O2

CM 6

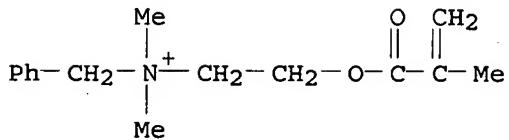
CRN 79-06-1  
CMF C3 H5 N O

RN 142276-85-5 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with (2Z)-2-butenedioic acid, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, ethenylbenzene, N,N'-methylenebis[2-propenamide], methylenebutanedioic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

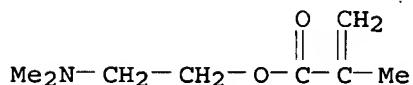
CRN 46917-07-1  
CMF C15 H22 N O2 . Cl



● Cl -

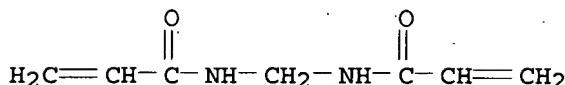
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



CM 3

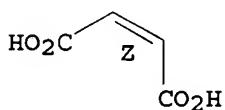
CRN 110-26-9  
CMF C7 H10 N2 O2



CM 4

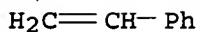
CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



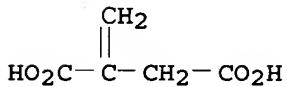
CM 5

CRN 100-42-5  
CMF C8 H8



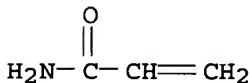
CM 6

CRN 97-65-4  
 CMF C5 H6 O4



CM 7

CRN 79-06-1  
 CMF C3 H5 N O



IC ICM C08F220-56  
 ICS D21H017-37  
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)  
 IT Crosslinking agents  
 (vinyl monomers, for (meth)acrylamide polymers, as paper strength improvers)  
 IT 70850-03-2P 142250-55-3P 142250-56-4P 142250-57-5P  
**142250-58-6P** 142250-59-7P 142250-60-0P  
**142250-61-1P** 142250-62-2P 142250-63-3P  
**142250-64-4P** 142250-65-5P 142250-66-6P  
**142250-67-7P** 142250-68-8P 142250-69-9P  
**142250-70-2P** 142276-84-4P 142276-85-5P  
 (preparation of, as paper strength improvers)

L61 ANSWER 36 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1991:230116 HCAPLUS  
 DOCUMENT NUMBER: 114:230116  
 TITLE: N-Methyl-N-vinylacrylamide as water-soluble crosslinking agent  
 INVENTOR(S): Nagamoto, Akimoto; Harada, Kazuya  
 PATENT ASSIGNEE(S): Kohjin Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02304052	A	19901217	JP 1989-120527	19890516
PRIORITY APPLN. INFO.:			JP 1989-120527	19890516

ED Entered STN: 15 Jun 1991

AB The title compound (I) is prepared with H<sub>2</sub>C:CHCONMeCH<sub>2</sub>CH<sub>2</sub>OH (II) as the intermediate. Amidation of H<sub>2</sub>C:CHCOCl with MeNHCH<sub>2</sub>CH<sub>2</sub>OH in CHCl<sub>3</sub> containing phenothiazine at -30° gave II which was heated with Fe<sup>3+</sup> ions at 400° to give I (99.9% purity). A 1% aqueous solution of I showed no change during 2 wk of storage. Copolymer. of acrylamide and I gave a crosslinked copolymer having intrinsic viscosity 17.46 and good water solubility

IT 133768-28-2P

(preparation of crosslinked, water-absorbing)

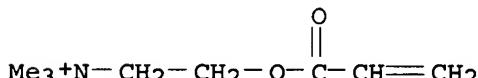
RN 133768-28-2 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with N-ethenyl-N-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

CMF C<sub>8</sub> H<sub>16</sub> N O<sub>2</sub> . Cl

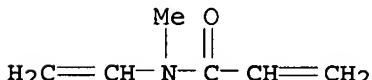


● Cl<sup>-</sup>

CM 2

CRN 44642-58-2

CMF C<sub>6</sub> H<sub>9</sub> N O



IC ICM C07C233-09

ICA C08F026-02

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 23, 35

IT Crosslinking agents

(methylvinylacrylamide, water-soluble, preparation of)

IT 133768-28-2P

(preparation of crosslinked, water-absorbing)

L61 ANSWER 37 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:145056 HCPLUS

DOCUMENT NUMBER: 114:145056

TITLE: Preparation of cationic polymers and their use as thickeners for aqueous acid solutions

INVENTOR(S): Hawe, Malcolm; Farrar, David

PATENT ASSIGNEE(S): Allied Colloids Ltd., UK

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 395282	A2	19901031	EP 1990-304057	19900417
EP 395282	A3	19910918		
EP 395282	B1	19950329		
R: BE, DE, ES, FR, GB, IT, NL				
ES 2071015	T3	19950616	ES 1990-304057	19900417
US 5100660	A	19920331	US 1990-512778	19900420
CA 2015193	A1	19901021	CA 1990-2015193	19900423
CA 2015193	C	200000118		
PRIORITY APPLN. INFO.:			GB 1989-9095	A 19890421

ED Entered STN: 19 Apr 1991

AB Aqueous acid solns. are thickened by 0.01-5% cationic polymer in the form of particles <10- $\mu\text{m}$  in size. The useful cationic polymers are formed from a H<sub>2</sub>O-soluble cationic ethylenically unsatd. monomer or blend of monomers that includes a polyethylenically unsatd. crosslinking agent. The concentration of the crosslinking agent is carefully controlled so that the viscosifying effect can be optimized while minimizing the amount of the polymer added. The aqueous compns., which may contain a quaternary ammonium surfactant, are useful as agricultural or veterinary biocides and as households industrial or institutional cleaners. Thus, a polymer was formed from a 80:20 mixture of MeCl quaternized dimethylaminoethylacrylate and acrylamide containing 25 ppm methylenebisacrylamide crosslinker using a reversed phase method. The polymers were then dissolved in deionized H<sub>2</sub>O showing Brookfield viscosity (at 0.1% polymer concentration) 700 cPs, compared with 350 cPs for the same solution without the crosslinker.

IT 89917-33-9

(crosslinked, thickeners, for aqueous solns.)

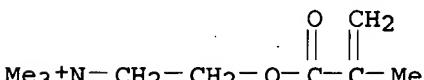
RN 89917-33-9 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[ (2-methyl-1-oxo-2-propen-1-yl)oxy] -, chloride (1:1), polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (CA INDEX NAME)

CM 1

CRN 5039-78-1

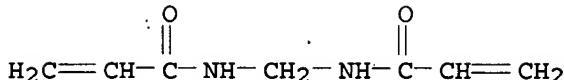
CMF C9 H18 N O2 . Cl



● Cl -

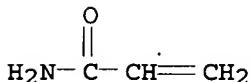
CM 2

CRN 110-26-9  
CMF C7 H10 N2 O2



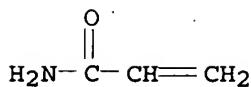
CM 3

CRN 79-06-1  
CMF C3 H5 N O



IC ICM C08J003-03  
ICI C08L033-00  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 19, 46  
IT Crosslinking agents  
(ethylenically unsatd. monomers, for cationic polymer thickeners)  
IT 89917-33-9  
(crosslinked, thickeners, for aqueous solns.)

L61 ANSWER 38 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1990:78854 HCAPLUS  
DOCUMENT NUMBER: 112:78854  
TITLE: Copolymers of acrylamide and a novel sulfobetaine amphoteric monomer  
AUTHOR(S): Salazar, Luis C.; McCormick, Charles L.  
CORPORATE SOURCE: Dep. Polymer Sci., Univ. South. Mississippi, Hattiesburg, MS, 39406-0076, USA  
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1989), 30(2), 344-5  
CODEN: ACPPAY; ISSN: 0032-3934  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ED Entered STN: 03 Mar 1990  
AB The tert-N of CH<sub>2</sub>:CHCONHC(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub> was used to open the ring of 1,3-propane sultone to prepare H<sub>2</sub>C:CHCONHC(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>N+(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>SO<sub>3</sub><sup>-</sup> (I). I was then free-radically copolymerd. with acrylamide, with varying feed ratios. Reactivity ratios indicated a random distribution of the 2 monomers, and at all feed ratios of I, the intrinsic viscosities of the resulting polymer increased with added electrolytes, showing its potential use as an absorbent material or viscosifier.  
IT 79-06-1, 2-Propenamide, reactions  
(polymerization of, radical, with vinyl sulfobetaine, reactivity ratio in)  
RN 79-06-1 HCAPLUS  
CN 2-Propenamide (CA INDEX NAME)



IT 125395-04-2P

(preparation of, as polymeric absorbent or viscosifier)

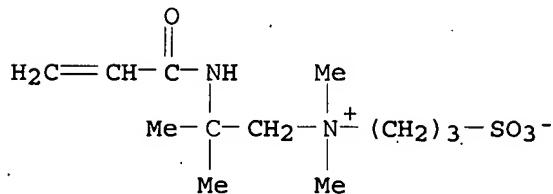
RN 125395-04-2 HCPLUS

CN 1-Propanaminium, N,N,2-trimethyl-2-[(1-oxo-2-propenyl)amino]-N-(3-sulfopropyl)-, inner salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 125341-96-0

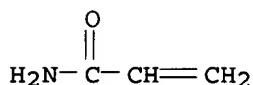
CMF C12 H24 N2 O4 S



CM 2

CRN 79-06-1

CMF C3 H5 N O



CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 35, 46

IT 79-06-1, 2-Propenamide, reactions

(polymerization of, radical, with vinyl sulfobetaine; reactivity ratio in)

IT 125395-04-2P

(preparation of, as polymeric absorbent or viscosifier)

L61 ANSWER 39 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:9781 HCPLUS

DOCUMENT NUMBER: 110:9781

TITLE: Manufacture of hydrophilic, anticorrosive coatings on aluminum using water-thinnable polymers based on (meth)acrylamide or its derivatives

INVENTOR(S): Ogino, Takao; Sako, Ryosuke; Kanazawa, Motoki; Nishihara, Akira; Okita, Hiroshi

PATENT ASSIGNEE(S): Nihon Parkerizing Co., Ltd., Japan

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3744032	A1	19880707	DE 1987-3744032	19871224
JP 63171683	A	19880715	JP 1986-315816	19861229
JP 2512452	B2	19960703		
AU 8782643	A	19880630	AU 1987-82643	19871217
AU 587671	B2	19890824		
EP 276476	A1	19880803	EP 1987-119189	19871224
R: AT, BE, CH, DE, FR, IT, LI, NL, SE				
JP 08206595	A	19960813	JP 1995-294192	19951113
JP 2564479	B2	19961218		
PRIORITY APPLN. INFO.:			JP 1986-315816	A 19861229

ED Entered STN: 06 Jan 1989

AB Anticorrosive, hydrophilic coatings for Al, especially in heat exchangers, are manufactured from aqueous solns. or dispersions of polymers based on CH<sub>2</sub>:CR1CONR2R3 (R1 = H, Me; R2, R3 = H, C1-4 alkyl, PhCH<sub>2</sub>, C2-3 hydroxyalkyl) and water-soluble organic and/or inorg. crosslinkers. Boehmite or Cr conversion primers are applied to the Al, and in some cases a water glass (I) layer is applied over the polymer layer. Thus, treating an Al sheet with CrPO<sub>4</sub> (Cr content in the layer 70 mg/cm<sup>2</sup>), applying an aqueous mixture containing polyacrylamide (mol. weight 800,000) 40, water-soluble Elastron A-42 (polyurethane) 10, and H<sub>3</sub>PO<sub>4</sub> 30 g/L, drying 3 min at 180° (film thickness 0.5 μm), applying an aqueous I solution (thickness of dry top layer 0.5 μm), and drying gave a coating with salt-fog corrosion resistance >240 h (JIS Z-2371) and water-contact angles <5 and 25-30° before and after an 8-h exposure to flowing water followed by drying 16 h at 80°, resp.

IT 117778-90-2  
(coatings containing, anticorrosive, hydrophilic, water-thinned, for aluminum)

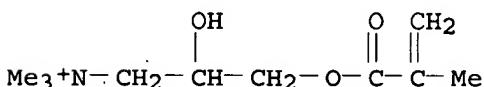
RN 117778-90-2 HCPLUS

CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 2-propenamide and 2,2'-(2,5,8,11-tetraoxadodecane-1,12-diyl)bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 13052-11-4

CMF C10 H2O N O3 . Cl

● Cl<sup>-</sup>

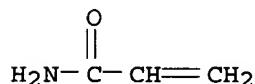
CM 2

CRN 1954-28-5



WO 8503722	A1	19850829	WO 1985-GB56	19850213
W: AU, BR, JP, NO, US				
EP 153146	A1	19850828	EP 1985-300959	19850213
R: AT, BE, CH, DE, FR, IT, LI, NL, SE				
AU 8539367	A	19850910	AU 1985-39367	19850213
BR 8505171	A	19860121	BR 1985-5171	19850213
ES 540381	A1	19860601	ES 1985-540381	19850213
JP 61501208	T	19860619	JP 1985-500746	19850213
JP 06031435	B	19940427		
NO 8504069	A	19851014	NO 1985-4069	19851014
US 4624890	A	19861125	US 1985-793068	19851015
PRIORITY APPLN. INFO.:			GB 1984-4000	A 19840215
			WO 1985-GB56	A 19850213

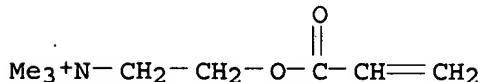
ED Entered STN: 19 Apr 1986  
 AB A fibrous substrate treated with a cationic acrylamide polymer, such as Zetag 63, as a dirt-attracting agent gives streak-free cleaning of glossy hard surfaces. Thus, a porous substrate comprising laminated layers of paper (with high wet strength) and nonwoven polypropene-viscose fabric was treated with a 0.1% aqueous solution of Zetag 63, dried at 50°, washed with a non-streak cleaning composition, and impregnated with the same composition to prepare a cloth suitable for wiping dirt from surfaces without streaking.  
 IT 79-06-1D, polymers  
     (cationic, cleaning cloth containing, nonstreak, for glossy surfaces)  
 RN 79-06-1 HCPLUS  
 CN 2-Propenamide (CA INDEX NAME)



IT 69418-26-4  
     (cleaning cloth containing, nonstreak, for glossy surfaces)  
 RN 69418-26-4 HCPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

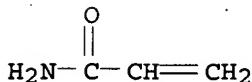
CRN 44992-01-0  
 CMF C8 H16 N O2 . Cl



● Cl-

CM 2

CRN 79-06-1  
CMF C3 H5 N O



IC ICM C11D003-37  
ICS C11D017-04; D21H003-38; A47L013-17; D06M015-285  
CC 46-6 (Surface Active Agents and Detergents)  
IT Detergents  
(cleaning compns., cationic acrylamide polymer-containing, nonstreak  
wiping cloth containing)  
IT 79-06-1D, polymers  
(cationic, cleaning cloth containing, nonstreak, for glossy surfaces)  
IT 58799-61-4 69418-26-4 69418-26-4  
69418-26-4 100754-39-0 101239-91-2 101239-92-3  
(cleaning cloth containing, nonstreak, for glossy surfaces)

L61 ANSWER 41 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:579872 HCAPLUS  
DOCUMENT NUMBER: 103:179872  
TITLE: Sizing agent and paper sizing method  
INVENTOR(S): Rende, Dominic S.; Breslin, Michael D.  
PATENT ASSIGNEE(S): Nalco Chemical Co., USA  
SOURCE: Eur. Pat. Appl., 35 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 151994	A2	19850821	EP 1985-100782	19850125
EP 151994	A3	19851127		
EP 151994	B1	19910807		
EP 151994	B2	19950419		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
CA 1249388	A1	19890124	CA 1984-467999	19841116
FI 8500296	A	19850728	FI 1985-296	19850123
FI 81860	B	19900831		
FI 81860	C	19901210		
AU 8538004	A	19850801	AU 1985-38004	19850123
AU 577735	B2	19880929		
DK 8500340	A	19850728	DK 1985-340	19850125
DK 172016	B1	19970915		
BR 8500339	A	19850903	BR 1985-339	19850125
ES 539847	A1	19860901	ES 1985-539847	19850125
AT 66028	T	19910815	AT 1985-100782	19850125
PL 148735	B1	19891130	PL 1985-251704	19850126
JP 60246893	A	19851206	JP 1985-12723	19850128
CS 264115	B2	19890613	CS 1985-583	19850128
PRIORITY APPLN. INFO.:			US 1984-574324	A 19840127
			US 1984-625476	A 19840625
			EP 1985-100782	A 19850125

OTHER SOURCE(S): MARPAT 103:179872

ED Entered STN: 30 Nov 1985

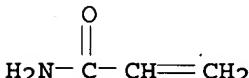
AB An improved method for the preparation of emulsified alkenylsuccinic anhydride sizes for paper, the emulsion containing H<sub>2</sub>O, alkenylsuccinic anhydride, and a cationic agent, comprises using as the cationic agent a H<sub>2</sub>O-soluble cationic vinyl addition polymer having a mol. weight of 104-106 at a level of 0.01-10.0 weight% polymer solids. Sized paper products prepared from the alkenylsuccinic anhydride emulsions made with the polymers have superior ink holdout and strength. Thus, poly(diallyldimethylammonium chloride) (I) [26062-79-3], acrylamide-(dimethylamino)ethyl acrylate copolymer methochloride (II) [99015-86-8], acrylamide-(methacrylamidopropyl)trimethylammonium chloride copolymer (III) [58627-30-8], and dimethylamine-epichlorohydrin copolymer (IV) [25988-97-0] were evaluated as alkenylsuccinic anhydride emulsification and retention aids in a paper slurry and compared in terms of particle size, phys. emulsion stability, and sizing performance to conventional alkenylsuccinic anhydride emulsions in H<sub>2</sub>O or cationic starch. I (mol. weight 235,000), II, III, and IV emulsions had particle size 0.5-3 μ, were stable, and in acid ink penetration tests (conducted at 80% reflectance using 1% HCO<sub>2</sub>H and 1.25% naphthol green test ink), took 151-434 s, vs. 1-10 μ, unstable, and 15-377 s, resp., for similar emulsions containing distilled H<sub>2</sub>O or cationic starch.

IT 79-06-1D, reaction products with formaldehyde and lower secondary amines, polymers 58627-30-8

(emulsifiers, for alkenylsuccinic anhydride sizes)

RN 79-06-1 HCPLUS

CN 2-Propenamide (CA INDEX NAME)



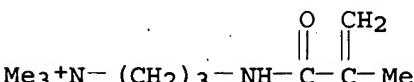
RN 58627-30-8 HCPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propen-1-yl)amino]-, chloride (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

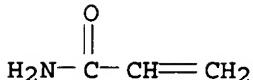
CRN 51410-72-1

CMF C10 H21 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 79-06-1  
CMF C3 H5 N O



IC ICM D21H003-02  
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)  
Section cross-reference(s): 46  
IT 79-06-1D, reaction products with formaldehyde and lower  
secondary amines, polymers 25988-97-0 26062-79-3 26590-05-6  
58627-30-8 99015-86-8 99015-88-0 99015-90-4 99015-92-6  
(emulsifiers, for alkenylsuccinic anhydride sizes)

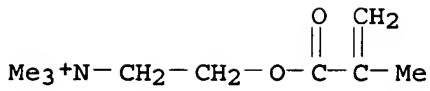
L61 ANSWER 42 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1985:7636 HCAPLUS  
DOCUMENT NUMBER: 102:7636  
TITLE: Water-soluble acrylamide polymers  
PATENT ASSIGNEE(S): Sankyo Kasei Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59157105	A	19840906	JP 1983-30595	19830225
JP 03008365	B	19910205		
PRIORITY APPLN. INFO.:			JP 1983-30595	19830225

ED Entered STN: 12 Jan 1985  
AB Acrylamide is polymerized in water containing aliphatic dialdehydes to give flocculating agents. Thus, a 3% aqueous bentonite suspension mixed with 2.5 mg/L acrylamide-glutaraldehyde-Na acrylate copolymer [93838-17-6] had sedimentation velocity 43 cm/min, compared with 23 when prepared without the aldehyde.  
IT 93838-19-8  
(flocculating agents)  
RN 93838-19-8 HCAPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with hexanedral and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1  
CMF C9 H18 N O2 . Cl



● Cl -

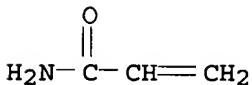
CM 2

CRN 1072-21-5  
CMF C6 H10 O2

OHC—(CH<sub>2</sub>)<sub>4</sub>—CHO

CM 3

CRN 79-06-1  
CMF C3 H5 N O



IC C08F020-58; C08F002-10  
CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 61  
IT Crosslinking agents  
(aliphatic dialdehydes, for acrylamide polymer flocculants)  
IT 93838-17-6 93838-18-7 93838-19-8  
(flocculating agents)

L61 ANSWER 43 OF 44 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1984:215300 HCPLUS  
 DOCUMENT NUMBER: 100:215300  
 TITLE: Water waving of hair  
 INVENTOR(S): Mahieu, Claude; Papantoniou, Christos  
 PATENT ASSIGNEE(S): Oreal S. A., Fr.  
 SOURCE: Ger. Offen., 21 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3325145	A1	19840119	DE 1983-3325145	19830712
DE 3325145	C2	19910321		
FR 2530141	A1	19840120	FR 1982-12298	19820713
FR 2530141	B1	19850308		

US 4676263	A 19870630	US 1983-512673	19830711
GB 2125291	A 19840307	GB 1983-18818	19830712
GB 2125291	B 19850904		

PRIORITY APPLN. INFO.: FR 1982-12298 A 19820713

OTHER SOURCE(S): MARPAT 100:215300

ED Entered STN: 23 Jun 1984

AB Hair is waved by impregnating with cosmetics containing a H<sub>2</sub>O-soluble polymer with ≥5% primary amide groups, a crosslinking agent, and an acid catalyst, winding the hair on rollers, and drying with the addition of heat. The cosmetics may be formulated as 1-, 2-, or 3-part aqueous or aqueous-alc. solns. The mixture contains 0.1-5% of the polymer, 4-30% (based on weight of the polymer) of the crosslinking agent, and enough acid to give pH 1.2. Thus, a pH 6 solution of poly(β-alanine) [25513-34-2] (17% primary amide units) 1, glutaraldehyde [111-30-8] 0.1, perfume 0.05, and H<sub>2</sub>O to 100 g was mixed with 2.1 mL 1N HCl to give a pH 2 solution that was applied immediately to the hair, which was rolled and dried at 60° for .apprx.30 min. When the rollers were removed the curls combed easily, felt soft, and wave retention was good.

IT 90311-16-3

(hair waving solns. containing aldehyde crosslinking agents and)

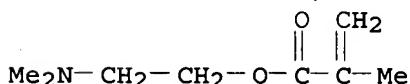
RN 90311-16-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

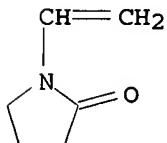
CMF C8 H15 N O2



CM 2

CRN 88-12-0

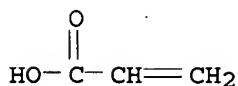
CMF C6 H9 N O



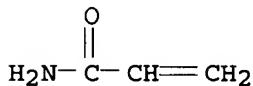
CM 3

CRN 79-10-7

CMF C3 H4 O2



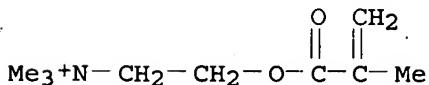
CM 4

CRN 79-06-1  
CMF C3 H5 N O

CM 5

CRN 6891-44-7  
CMF C9 H18 N O2 . C H3 O4 S

CM 6

CRN 33611-56-2  
CMF C9 H18 N O2

CM 7

CRN 21228-90-0  
CMF C H3 O4 S $\text{Me}-\text{O}-\text{SO}_3^-$ 

IC A61K007-09  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT Crosslinking agents  
     (aldehydes, hair waving solns. containing amide group-containing polymers  
     and)  
 IT 24937-14-2 25513-34-2 26590-05-6 90311-16-3  
     (hair waving solns. containing aldehyde crosslinking agents and)

L61 ANSWER 44 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:570302 HCAPLUS

DOCUMENT NUMBER: 87:170302

TITLE: Composition for acidifying underground formations

INVENTOR(S): Swanson, Billy Lars

PATENT ASSIGNEE(S): Phillips Petroleum Co., USA

SOURCE: Ger. Offen., 39 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2657443	A1	19770707	DE 1976-2657443	19761217
DE 2657443	C3	19800604		
DE 2657443	B2	19790927		
CA 1073655	A1	19800318	CA 1976-264188	19761026
NO 7604346	A	19770627	NO 1976-4346	19761222
NO 148787	B	19830905		
NO 148787	C	19831214		
NL 7614346	A	19770628	NL 1976-14346	19761223
NL 168906	B	19811216		
NL 168906	C	19820517		
GB 1562308	A	19800312	GB 1976-53749	19761223
US 4191657	A	19800304	US 1978-902122	19780502
PRIORITY APPLN. INFO.:				US 1975-643983 A 19751224

ED Entered STN: 12 May 1984

AB Gelled solns. for the title process, the viscosity of which fall rapidly to moderate levels after completion of the operation, contain 0.2-3% ≤45 mol% hydrolyzed (meth)acrylamide polymer, 0.4-60% acid, and 0.001-5% H<sub>2</sub>O-dispersible aldehyde as gelling agent. Thus, heating 28% HCl containing 1% SPX 5025 (acrylamide-Na 2-acrylamido-2-methyl-1-propanesulfonate polymer) [38193-60-1] and 0.5% paraformaldehyde at 67-8° increases the outflow time from 2.7 s to 6.5 s. The resulting gel remains clear and shows no syneresis when heated at 93°.

IT 26006-22-4

(gelling agents, for acid solns. for fracturing of oil wells)

RN 26006-22-4 HCPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, methyl sulfate (1:1), polymer with 2-propenamide (CA INDEX NAME)

CM 1

CRN 79-06-1

CMF C3 H5 N O



CM 2

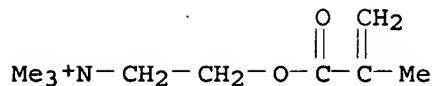
CRN 6891-44-7

CMF C9 H18 N O<sub>2</sub> . C H<sub>3</sub> O<sub>4</sub> S

CM 3

CRN 33611-56-2

CMF C9 H18 N O<sub>2</sub>



CM 4

CRN 21228-90-0  
CMF C H3 O4 SMe-O-SO<sub>3</sub><sup>-</sup>

IC E21B043-27  
CC 51-2 (Fossil Fuels, Derivatives, and Related Products)  
Section cross-reference(s): 37  
IT Crosslinking agents  
(aldehydes, for acrylamide copolymer gels)  
IT 26006-22-4 38193-60-1  
(gelling agents, for acid solns. for fracturing of oil wells)

=> d his nofile

(FILE 'HOME' ENTERED AT 10:08:13 ON 24 AUG 2007)

FILE 'HCAPLUS' ENTERED AT 10:08:23 ON 24 AUG 2007  
 L1 1 SEA ABB=ON PLU=ON US20050245668/PN  
 SEL RN

FILE 'REGISTRY' ENTERED AT 10:08:47 ON 24 AUG 2007  
 L2 5 SEA ABB=ON PLU=ON (196004-32-7/BI OR 208667-46-3/BI OR  
 27252-75-1/BI OR 54511-77-2/BI OR 632358-56-6/BI)  
 L3 1 SEA ABB=ON PLU=ON L2 AND 1-5/N  
 L4 1482 SEA ABB=ON PLU=ON 5039-78-1/CRN  
 L5 3921 SEA ABB=ON PLU=ON 110-26-9/CRN  
 L6 55 SEA ABB=ON PLU=ON L4 AND L5

FILE 'HCAPLUS' ENTERED AT 10:10:34 ON 24 AUG 2007  
 L7 93 SEA ABB=ON PLU=ON L6  
 L8 1 SEA ABB=ON PLU=ON L7 AND L1

FILE 'REGISTRY' ENTERED AT 10:14:04 ON 24 AUG 2007  
 L9 STR  
 L10 STR L9  
 L11 SCR 2043 AND 1993  
 L12 0 SEA SSS SAM L9 AND L10 AND L11  
 L13 0 SEA SSS SAM L9 AND L10  
 L14 14 SEA SSS SAM L9  
 L15 SCR 2043  
 L16 50 SEA SSS SAM L9 AND L15  
 L17 8484 SEA SSS FUL L9 AND L15  
 L18 1 SEA ABB=ON PLU=ON L17 AND L2  
 SAV L17 HAR925/A  
 L19 3108 SEA ABB=ON PLU=ON L17 AND 2-3/N  
 L20 898 SEA ABB=ON PLU=ON L17 AND 2/NC  
 L21 STR L10  
 L22 0 SEA SUB=L17 SSS SAM L21  
 L23 0 SEA SUB=L17 SSS FUL L21  
 E (C15 H23 N2 O . C8 H16 N2 O . C4 H4 O4 . C3 H5 N O . CL)X  
 L24 1 SEA ABB=ON PLU=ON "(C15 H23 N2 O . C8 H16 N2 O . C4 H4  
 O4 . C3 H5 N O . CL)X"/MF  
 L25 14923 SEA ABB=ON PLU=ON 79-06-1/CRN  
 L26 1473 SEA ABB=ON PLU=ON L17 AND L25  
 L27 STR L21  
 L28 50 SEA SUB=L17 SSS SAM L27  
 L29 2125 SEA SUB=L17 SSS FUL L27  
 SAV L29 HAR925A/A  
 L30 1 SEA ABB=ON PLU=ON L2 AND GLYC?  
 E DIVINYL BENZENE/CN  
 L31 13 SEA ABB=ON PLU=ON DIVINYL BENZENE?/CN  
 E TETRA ALLYL AMMONIUM CHLORIDE/CN  
 E 1,7-OCTADIENE/CN  
 L32 1 SEA ABB=ON PLU=ON "1,7-OCTADIENE"/CN  
 E ACRYLAMIDE/CN  
 L33 1 SEA ABB=ON PLU=ON ACRYLAMIDE/CN  
 E METHACRYLAMIDE/CN  
 L34 1 SEA ABB=ON PLU=ON METHACRYLAMIDE/CN  
 L35 4 SEA ABB=ON PLU=ON ACRYLAMIDOACETIC ACID?/CNS  
 L36 34 SEA ABB=ON PLU=ON METHYLENE-BISACRYLAMID?/CNS

FILE 'HCAPLUS' ENTERED AT 10:39:49 ON 24 AUG 2007

L37 2928 SEA ABB=ON PLU=ON L29  
L38 566 SEA ABB=ON PLU=ON L30  
L39 921 SEA ABB=ON PLU=ON L32  
L40 14094 SEA ABB=ON PLU=ON L33  
L41 2191 SEA ABB=ON PLU=ON L34  
L42 13 SEA ABB=ON PLU=ON L35  
L43 724 SEA ABB=ON PLU=ON L36  
L44 173 SEA ABB=ON PLU=ON L37 AND (L38 OR L39 OR L40 OR L41 OR  
L42 OR L43)  
L45 9 SEA ABB=ON PLU=ON L44 AND DETERG?/SC,SX  
E DETERGENTS/CT  
L46 48633 SEA ABB=ON PLU=ON DETERGENTS+PFT,NT,OLD,NEW/CT  
L47 5 SEA ABB=ON PLU=ON L44 AND L46  
L48 5 SEA ABB=ON PLU=ON L37 AND L47  
L49 384 SEA ABB=ON PLU=ON L37 AND (CROSSLINK? OR CROSS(A)LINK?)  
L50 11 SEA ABB=ON PLU=ON L49 AND (L46 OR DETERG?)  
L51 65 SEA ABB=ON PLU=ON L37 AND (L46 OR DETERG?)  
E CROSSLINKS/CT  
E CROSSLINKING/CT  
L52 70771 SEA ABB=ON PLU=ON CROSSLINKING+PFT,NT,OLD,NEW/CT  
L53 14 SEA ABB=ON PLU=ON L37 AND L52  
L54 0 SEA ABB=ON PLU=ON L53 AND DETERG?  
L55 25 SEA ABB=ON PLU=ON L50 OR L53  
L56 43 SEA ABB=ON PLU=ON L49 AND (L38 OR L39 OR L40 OR L41 OR  
L42 OR L43)  
L57 64 SEA ABB=ON PLU=ON L55 OR L56  
E CROSSLINKING AGENTS/CT  
L58 38452 SEA ABB=ON PLU=ON "CROSSLINKING AGENTS"+PFT,NT,OLD,NEW/CT  
L59 24 SEA ABB=ON PLU=ON L37 AND L58  
L60 21 SEA ABB=ON PLU=ON L45 OR L47 OR L48 OR L50  
L61 44 SEA ABB=ON PLU=ON L59 OR L60